

Annex C - EAD Standard to EAD Local Access Differential

BT's Response to paragraphs 10.18-10.35 of the May 2015 LLCC Consultation

Ethernet pricing differentials (STD vs LA)

1. In paragraphs 10.18-10.35 of the May 2015 BCMR Consultation, Ofcom considers the pricing differentials between EAD LA and EAD STD variants, and proposes to impose a 'basis of charges' condition:

"We therefore propose to impose a 'basis of charges' condition, which would require the rental and connection charges of EAD to be set by reference to the rental and connection charges for EAD LA, adjusted to reflect the difference in the long run incremental costs of EAD. We further propose to require that BT assess the differential on a bottom-up basis, rather than by reference to regulatory financial statements, and that the differential be assessed using financial information from the preceding year. We propose that this requirement should apply from the second year of the charge control period to enable BT to adjust prices in the first year."(10.29)

2. In BT's view Ofcom's proposed 'basis of charges' condition is not objectively justifiable and is disproportionate in relation to what it is intended to achieve.
3. Ofcom's justification for the proposed condition is set out in paragraphs 10.26 to 10.28 of the May 2015 BCMR Consultation:

"10.26 These pricing differences give rise to two concerns, firstly that CPs may face higher costs than BT because they consume proportionately more EAD than BT, and secondly that CPs will be incentivised to make network design choices that are not efficient, e.g. to locate POPs in BT's ASNs when other locations would be more efficient or equally as efficient.

10.27 In view of these concerns, we consider that BT should be required to ensure that the differences in EAD and EAD LA reflect differences in long-run incremental costs. This would ensure that the choice between the two products is productively efficient as it would be based on differences in the underlying costs of provision. Price differentials equal to incremental cost differentials means that purchasers face incentives to use the service which minimises total costs, and in addition means that the amount of common costs recovered per line should be the same for a given bandwidth of circuit.

10.28 Setting the price difference between EAD LA and EAD equal to LRIC would also reduce the risk of excessive pricing or undue discrimination by BT and address the risk that BT recovers more common costs from non-Local Access variants, which are proportionally more important to its competitors."

4. Ofcom's justification for introducing this remedy is flawed for a number of reasons, making it **not objectively justifiable**:
 - a. First, Ofcom overstates the risk of undue discrimination by BT. The propensity for both external and internal CPs to use LA circuits as opposed to STD is converging, with all CPs increasingly taking LA circuits. ✂.

- b. Second, Ofcom should allow BT to recover more costs from standard circuits, which are significantly more complex than LA circuits.
 - c. Third, LA circuits can be available from any type of exchanges not just ASNs, hence any concerns of geographic risks are not founded.
 - d. Fourth, Ofcom's analysis has been conducted on historic data, and pricing data used for the analysis is not correct.
 - e. Finally, Ofcom has discarded wider information available on cost, e.g. FAC and DSAC which show that the cost structure for standard circuits is fundamentally different to that of LA.
5. In any event, Ofcom's proposed remedy is **disproportionate**. It requires adjustments of ⌘ on EAD1G rental, and ⌘ on EAD10/100M rental by April 17/18 resulting in ⌘ revenue reduction, which is ⌘ of the required give-away for the first two years of the control and ⌘ of the total give-away required for the three years of the control period. Moreover, it undermines Ofcom's CPI-X charge control approach, and creates complexities of implementation, it prevents BT from responding to market demand or competitive pressures on prices, and disregards the notions of proportionality between prices and costs, as well as return on capital employed.
 6. We discuss the above in more details below.

Propensity for all CPs to use LA circuits and risks of discrimination towards CPs

The propensity for both external and internal CPs to use LA circuits as opposed to STD is converging, with all CPs increasingly taking LA circuits

7. Ofcom provides a summary of uses of product variants by internal and external CPs. This is based on 13/14 RFS [Table 10.2 of the May 2015 BCMR Consultation].
8. Based on BT's forecast for 15/16, we believe the consumption to be as follows:

	Internal	External		Internal	External
EAD Local Access	⌘	⌘		⌘	⌘
EAD other	⌘	⌘		⌘	⌘
WES	⌘	⌘		⌘	⌘
BES	⌘	⌘		⌘	⌘
EBD	⌘	⌘		⌘	⌘
OSA & OSEA	⌘	⌘		⌘	⌘
Total	⌘	⌘		⌘	⌘

Note: ⌘

9. All CPs, internal and external, have increasingly used LA circuits as a result of the competitive prices they are offered at, the investments of CPs in PoPs, and the competitiveness in the

backhaul market enabling CPs to complement their LA circuits with backhaul from either Openreach or other operators.

10. Ofcom's indicates (at paragraph 10.21 of the May 2015 BCMR Consultation) that "*These differences suggest that EAD LA is better suited to BT's requirements than other CPs.*" For 15/16, our Openreach official forecast shows ✂ of external CPs' circuits being LA vs ✂ for downstream BT. The difference that Ofcom may have identified for 13/14 has drastically reduced in a short period of time, and will be reducing over time, meaning the difference will not be meaningful during the period of the control considered.
11. When making such considerations of consumption, Ofcom needs to take a forward looking view, rather than a historic view.

In BT's forecast, we currently predict the following split (all other things being equal) for 17/18.

17/18	Internal	External
EAD LA	✂	✂
EAD Other	✂	✂
Other	✂	✂

We therefore believe that any possible differences will continue to reduce, all other parameters remaining equal.

✂ ***we observe different patterns of usage*** ✂

12. When considering the ✂, its consumption of Standard is ✂, with ✂ of circuits being EAD standard, vs only ✂ for EAD LA.

	Circuits	%
EAD LA	✂	✂
EAD STD	✂	✂
WES	✂	✂
BES	✂	✂
EBD	✂	✂
OSA & OSEA	✂	✂
	✂	✂

13. ✂ it would not be possible for BT to discriminate in favour of its downstream operations. In fact, currently, the fact that EAD LAs are competitively priced can be considered ✂.

✂

14. There is a wider consideration of coverage, rather than simply current volumes of LA circuits.
15. ✂. We provide below a table showing the number of exchanges serving LA circuits by CP. From a total of 2,500 exchanges where LA circuits are currently in place ✂.

✂

16. ✂

17. In addition, Ofcom indicates that “This may be because ASNs are the nodes that BT has designated for backhaul aggregation and which are served by its principal backhaul service EBD.” (at paragraph 10.21 of the May 2015 BCMR Consultation). ✂

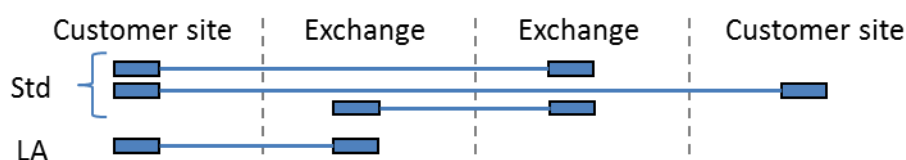
Nature and availability of STD vs LA circuits

Standard circuits are significantly more complex than LA circuits, and Ofcom should allow BT to recover more costs from these circuits

18. At today’s prices, the difference would be £1,200/year (not £1,264 as per paragraph 10.24 of the May 2015 BCMR Consultation).

19. EAD Standard circuits cover a significantly broader set of cases, and can be more complex with both ends potentially at customer sites.

We recap below in a simple diagram the various cases that an EAD standard can be used for.



An analysis of our EAD 1G circuits shows the following distribution of cases:

		Node	Site
1G Standard	Node	✂	✂
	Site	✂	✂

		Node	Site
1G LA	Node	✂	✂

20. This analysis shows that ✂ of EAD 1G Standard circuits go from customer site to customer site, where there is potentially twice as much work compared to an EAD LA. In addition, EAD 1G Standard can traverse multiple nodes. Overall the complexity and amount of work required for an EAD standard is significantly higher than that of an EAD LA, justifying a substantial price difference. As we discuss below [29], the fully allocated costs (FAC), and DSAC, are three times higher for standard circuits, than for LA, reflecting the difference in nature of these STD circuits vs LA circuits.

LA circuits can be available from any type of exchanges not just ASNs, hence any concerns of geographic risks are not founded

21. Ofcom says (at paragraph 10.19 of the May 2015 BCMR Consultation) that:

“The main difference between the variants is that EAD LA is only available for circuits with one end terminating at ASN exchanges whereas EAD and EAD Extended Reach may be used to connect any two locations (including BT exchanges) subject to circuit distance limits.”

22. EAD LAs are available for circuits terminating from an exchange, and going to a customer site within the same exchange footprint. We would like to clarify that – as opposed to what is stated at paragraph 10.19 - it is not only ASN exchanges but all types of exchanges from which EAD LA is offered. Conversely, EAD Standard and Extended Reach circuits can indeed connect any two locations, including BT exchanges, and are subject to circuit distance limits.

23. Ofcom’s conclusion that *“CPs will be incentivised to make network design choices that are not efficient, e.g. to locate POPs in BT’s ASNs when other locations would be more efficient or equally as efficient”* (at paragraph 10.26 of the May 2015 BCMR Consultation), is not correct. CPs can be offered an EAD LA circuit from any type of exchange, not just ASNs.

Current structure of charges

Ofcom’s analysis has been conducted on historic data, and pricing data used for the analysis is not factually correct

24. Ofcom’s understanding of BT’s current charges is not correct. Table 10.3, which is meant to reflect prices on April 1st 2015 is erroneous. Ofcom has incorporated prices from April 2014, and the main link charge also needs correction. We propose the following table instead, with corrections marked in red.

Annual Charges (excluding VAT)	EAD 1G STD	EAD 1G LA
Connection Charge	£2,100	£2,050
Rental charge (1 year contract)	£4,200	£3,000
Rental charge (5 year contract)	£4,152	£2,952
Main link charge (per km)	£372	Not applicable

25. As an alternative view to table 10.4, which is based on RFS 13/14 data, and represented a weighted average of product variants for non-local access variants, we propose that Ofcom considers the following calculations, based on current prices, and current marginal costs¹: for the plain version of EAD STD 1G²

¹ Marginal costs have been calculated on the basis of Openreach finance’s analysis of electronics, fibre work, fitting & testing, and other related costs.

² By that we mean EAD 1G Standard, as opposed to EAD 1G Extended Reach, EAD 1G Resilient RO1, or any other variants of EAD 1G which are blended into a single “EAD Other” in the RFS report.

	EAD STD 1G	EAD LA 1G
Cx	£2,100	2050
Rental	£4,200	3000
Mainlink	£1,860	
3yr TCO	£20,280	£11,050
3yr marginal costs	✂	✂
Contribution margin	✂	✂
Payback time (mths)	✂	✂

Note: Prices as of 1st April 2015, 5km main link distance

26. In this example, we see that an EAD STD 1G ✂. On the basis of commercial considerations, we do not see any justification to adjust rental prices of Standard vs LA.

Ofcom has discarded wider information available on cost, e.g. FAC and DSAC which show that the cost structure for Standard is fundamentally different to that of LA

27. We compare below total cost of ownership (TCO) over three years for each of 100M Standard, LA, and 1G Standard and LA product variants, with their respective DLRIC, FAC and DSAC as per the published RFS 13/14 (which Ofcom has used). In addition to comparing today's prices, we also provide a forward looking view by implementing reductions of ✂ respectively for the three years of the control period, as per the CPI-13.75% and 9% start charge adjustment. These are applied uniformly across products.

✂

28. We observe that:

- Comparing prices to DLRIC only is a very limited perspective on these products. EAD STD and LA product variants have significantly different ranges of DLRIC, FAC and DSAC which reflect the different natures of these circuits.
- By 2nd April 2016, both 100M STD and 1G STD would already be near or below FAC13/14, when LA circuits are still above FAC13/14.
- ✂ the DLRIC to FAC13/14 range.

29. Conversely, if we were to implement Ofcom's proposed remedy, we would have the following situation where EAD 1G LA ✂ as opposed to EAD 1G and 100M STD. Therefore this additional remedy distorts pricing more than it helps protect customers.

30. In addition, when considering the return of capital employed, BT's view is that this would create significant distortions in returns. We provide below a view by 18/19 using three different scenarios for price reductions that comply with the charge control requirements and with the EAD STD vs LA basis of charges. We use the CPI-X model and volumes provided by Ofcom as basis for the ROCE calculations.

✂³

³ ✂

✂

By not applying as much reduction to LA circuits throughout the control, the return on capital employed ✂

Disproportionality of the remedy

Ofcom's proposed remedy is disproportionate. It requires adjustments of ✂ on EAD 1G rental, and ✂ on EAD 10/100M rental by April 17/18 resulting in ✂ revenue reductions

31. To reduce the difference between EAD 1G STD and LA rentals to ca. ✂, and EAD 100M STD vs LA rentals to ca. ✂ (as per RFS13/14 accounts), it requires adjustments of ✂ on EAD 1G rental, and ✂ on EAD 10/100M rental by April 17/18.

	FY16/17	FY17/18	Total
EAD1G	✂	✂	✂
EAD100M	✂	✂	✂

32. This results in ✂ revenue reductions, which is ✂ of the required give-away for the first two years of the control period, and ✂ of the total give-away required for the three years of the control period.
33. While this does not constitute a requirement in excess of what BT needs to discharge within the wider Ethernet basket per se, it is a substantial proportion of the control, which aggravates our reservations as to its introduction.

CPI-X Charge control and basis of charges

Ofcom's proposed remedy undermines the CPI-X approach, prevents BT from responding to market demand, and creates a linkage between prices and incremental cost on an absolute basis, rather than on a relative basis

34. Ofcom has designed a CPI-X charge control which traditionally enables BT to respond to market demands, and retain some levels of flexibility in pricing its products. BT supports CPI-X controls which provide a good mechanism to reduce prices to required levels, while leaving sufficient flexibility to respond to market demands.
35. This proposed 'basis of charges' condition undermines this approach. It creates some significant complexities when selecting the new prices for the year, and means that BT may end up reducing further other products that present no benefits for the market, such as legacy products, as these can act as adjustment variables that help balance the discharge.
36. By determining the price for a Standard variant, and the price for an LA variant, Ofcom assumes that it has the best knowledge of what the requirements from the market are. It introduces a significant risk to create pricing inefficiencies where Openreach's prices do not match customer demand, and which competitors can exploit to their benefits and win either the STD or LA market, without giving any opportunity for Openreach to respond, due to fixed prices.

37. Prices should be compared to FAC, DLRIC and DSAC on relative terms (i.e. as ratios of charges vs FAC, DLRIC and DSAC) rather than in absolute terms (i.e. as differences between charges and FAC, DLRIC, and DSAC)⁴
38. We expand on the wider impacts of lack of flexibility and alternative approach to testing the proportionality of prices in our response to Section 10 of the June 2015 LLCC Consultation.

⁴ By that we mean that it is the price/cost ratio that should be constant, not the difference between price and cost. For instance if a product A is priced at £1100 and costs £1000, if it is used as reference for pricing a product B that costs £2000, then the pricing of product B should be showing the same price/cost ratio, and thus its price should be £2200, as opposed to £2100. This would ensure that the margin on both products is 10%.