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Dear Steve,

Ofcom consultation on its approach to risk in the assessment of the cost of capital

Energis welcomes the opportunity to respond to the second consultation on BT's cost of capital. We believe that Ofcom were correct to reconsider the level of BT's equity beta and welcome the wide ranging analysis presented by Ofcom in its consultation and supporting research papers. However, we do have some concerns about Ofcom's proposals. These are outlined in the answers to Ofcom's questions and in the additional sections discussing the risk free rate and BT's debt premium. A common theme is that Ofcom has been overly cautious when estimating many of the variables in the WACC calculation. Finally we are also concerned that Ofcom does not propose to apply the lower access beta to PPC tails and WES. We believe that these access services have similar risk profiles to other forms of access and that it is more consistent for all access assets in the ASD to have the same rate of return.

<u>Executive Summary</u>

Energis welcome the second consultation on BT's cost of capital which concentrates on re-estimating BT's equity beta and the potential impacts of dis-aggregating that beta. The document also touches briefly on the risk free rate and BT's debt premium. Although Ofcom does not ask for views on these two issues, we discuss both of these at the start of this document. Very broadly we believe that both the risk free rate and BT's debt premium have been over estimated.

Where BT's equity beta is concerned, we believe that Ofcom proposal to use an equity beta of 1.1 is over cautious given the evidence presented both by Ofcom and the Brattle Group. Energis accept that the setting of an equity beta is not a mechanistic process but instead a matter of striking a balance between the issues and evidence. However, we do not believe that such a 'balance' has been achieved. Although regulatory stability is an important issue, we believe that this has been given far too much weight when coming to a final figure. The work by the Brattle Group suggests that 'the best estimate of BT's current beta is 1'[1] and we support the use of that figure within the weighted average cost of capital calculation. We note that many other measures of BT's beta suggest that this in itself is a conservative figure.

Energis supports Ofcom in its work to disaggregate BT's beta. We believe that there is enough evidence to support a lower beta for products using BT's access network, though

[1] 'Beta Analysis of British Telecommunications: Update' Carlos Lapuerta and David Stallibrass, The Brattle Group, June 2005

believe that Ofcom has been over-cautious in its derivation of a beta for the access network. As we believe that BT's overall beta is 1, this would imply that the access beta is below this at around 0.8.

Finally, Energis would like to express its extreme concern that PPC tails and WES will not attract a lower rate of return if BT's beta is disaggregated. This was made clear in a meeting between Ofcom and UKCTA. We believe that this is an incorrect approach as PPC tails and WES face similar levels of systematic risk to other access services. Further it is our view that the ASD should face a consistent rate of return over all the services it produces.

The risk free rate:

As Ofcom notes, for an investment to be truly risk free 'the risk of default needs to be zero and additionally there must be no reinvestment risk'[2]. Energis agrees with Ofcom that 5 year gilts represent a reasonable compromise between a maturity relevant to the particular price control and the fact that BT may be making longer term investments. However, we believe that Ofcom's analysis within the second document of the level of the risk free rate is over cautious and that this should be revised downwards.

Ofcom state that as 'Figure 1..shows, the nominal rate for 5 year gilts has fallen over the last year and mechanistically applying a 3 month average of the most recent data would lead to a risk free rate of 4.5% or less'[3]. However, Ofcom also suggest that this is low by historical standards and revise the rate upwards to 4.7% - which it is stated is consistent with a real risk free rate of 2% and inflation of 2.6 to 2.7%.

Energis notes that the recent Bank of England Inflation Report[4] also suggests that these rates are low by historical standards. However, their data suggests that real interest rates have been falling from the beginning of the 1990s – i.e. for roughly fifteen years[5.] Energis believe that there have been structural changes to levels of planned saving which probably explain this and that such structural changes in behaviour are unlikely to be unwound in the near future. We also note that Ofcom's assumption that inflation will reach 2.6 to 2.7% seems to imply that that the Bank of England consistently misses its inflation target of 2%. For both these reasons, we believe that adding a premium to the 3 month average is mistaken and overly conservative.

BT's debt premium

Energis were also concerned about Ofcom's approach to this variable. Ofcom suggests that even though the benchmark yield for A- corporate debt has been falling (to 0.64% in mid June 2005), it still intends to use a debt premium of 1%. This is apparently because whilst

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[2] para 2.44 'Ofcom's approach to risk in the assessment of the cost of capital – Second Consultation' 23rd June 2005

[3] Figure 1 'UK Nominal Spot Rate. 2000-2005' 'Ofcom's approach to risk in the assessment of the cost of capital – Second Consultation' 23rd June 2005

[4] 'Inflation Report' May 2005 Bank of England

[5] See Chart A page 6 'Inflation Report' May 2005 Bank of England

‘Both the risk free rate and promised yields on corporate debt are both currently low relative to historical values, Ofcom’s view is that it would not be appropriate for Ofcom to base its estimates of both parameters on (low) current market values’[6].

Energis believe that if the evidence points strongly to a fall in the debt premium then this should not be ignored. This again is an overly cautious approach and could even suggest subjectivity rather than unbiased analysis. We believe that it would be better for Ofcom to accept that the evidence suggests a fall in the debt premium and reduce it. A rate of 0.8% is an adequate compromise between the evidence and a conservative approach.

Answers to Ofcom’s Questions

Question 9: Do stakeholders agree that Ofcom should revise its central estimate of BT’s equity beta downwards from 1.3 to 1.0, 1.1 or 1.2? Which of these figures is most appropriate?

As Ofcom notes, ‘a company’s equity beta reflects the systematic risk it faces relative to the average company in the market’[7] or alternatively that the ‘value of a company’s equity beta reflects movements in returns to shareholders (as measured by the sum of dividends and capital appreciation) from its shares relative to movements in the return from the equity market as a whole’[8]. To estimate the beta on a forward looking basis, in practice requires looking at historical data. Given the feedback from the previous consultation, Ofcom requested the Brattle Group reinvestigate BT’s equity beta. Energis welcomes this re-investigation.

Energis accept that any type of econometrics can be fraught with difficulty – given the statistical properties of the data, the time periods to be used etc. As such, we also agree that the resulting statistics should not be used without careful interpretation and that a mechanistic approach to deriving a company’s equity beta from such data would probably be mistaken. Ofcom’s preferred approach is ‘to give weight to a number of different estimation techniques, which, it believes, strike an appropriate balance amongst the issues.’[9] Obviously this seems a reasonable approach, as long as balancing the issues also involves taking account of the robustness of the different data sets used.

Ofcom considers a number of issues as regards the nature of the data to be used within the regressions. Where data frequency is concerned Ofcom examines whether it is more appropriate to use daily, monthly or weekly figures. Ofcom presents a number of arguments for and against each data type and concludes that it should ‘place a degree of weight on

[6] para 2.49 ‘Ofcom’s approach to risk in the assessment of the cost of capital – Second Consultation’ 23rd June 2005

[7] para 1.11 ‘Ofcom’s approach to risk in the assessment of the cost of capital – Second Consultation’ 23rd June 2005

[8] para 3.9 ‘Ofcom’s approach to risk in the assessment of the cost of capital – Second consultation’ 23rd June 2005

[9] para 3.12 ‘Ofcom’s approach to risk in the assessment of the cost of capital – Second consultation’ 23rd June 2005

both daily and monthly estimation techniques' and that 'the most appropriate estimation technique will be dependent on the statistical properties of the data set used[10].' However, as the Brattle Group report 'found strong evidence that a daily sampling interval produced the most robust results[11]', we would expect that Ofcom would give greater weight to the data derived from the daily statistics.

Where the data window is concerned, Ofcom's view 'is that (at least when using daily data) it is appropriate at present to use a relatively short window'[12]. Energis agree with this view.

Where the appropriate index is concerned, Ofcom notes that 'given the increasing prevalence of non-UK investment within the portfolios of UK investors there maybe increasingly strong grounds for estimating risk relative to an international portfolio….Ofcom's view is that some weight should therefore be given to beta estimates measured against international indices in addition to domestic ones'[13]. Again this seems reasonable, though we would note the Brattle Group's view that 'we suspect that recent international instability has contaminated the results against the All World index[14]' which suggests to us that this data is not as robust as UK data.

On the basis of the above, Energis believes that the greatest weight should be given to the two Brattle Group measures which use daily UK data for the period 2004-2005. The LBS RMS monthly data and the Brattle daily world data should be given less weight – given that they are less robust. A mechanistic approach purely on that basis would suggest that BT's beta was therefore around 0.8.

Energis accept that Ofcom believes 'that the costs associated with setting too low a cost of capital are greater than those associated with setting it too high'[15] i.e. because this may reduce investment and innovation. We also accept that there are arguments in favour of regulatory stability i.e. if a significant reduction in BT's equity beta needed to be reversed this could lead to unnecessary volatility in prices and uncertainty for all industry players.

However, we believe that Ofcom has placed too much weight on these two factors by suggesting an equity beta of 1.1. In our opinion, the data shows that BT's beta has fallen significantly and a cautious approach would assume that this is now currently around 1.0. We believe that this is supported by the Brattle Group's analysis, which takes 1.0 as the best current estimate of BT's beta, although this is the highest value within all its estimates.

[10] para 3.18 'Ofcom's approach to risk in the assessment of the cost of capital – Second consultation' 23rd June 2005
[11] para 2.2. 'Beta Analysis of British Telecommunications: Update' June 2005
[12] para 3.20 'Ofcom's approach to risk in the assessment of the cost of capital – Second consultation' 23rd June 2005
[13] para 3.21 'Ofcom's approach to risk in the assessment of the cost of capital – Second consultation' 23rd June 2005
[14] discussion, page 15 'Beta Analysis of British Telecommunications: Update' June 2005
[15] para 3.29 'Ofcom's approach to risk in the assessment of the cost of capital – Second consultation' 23rd June 2005

Question 10: What is the view of respondents of the standard of evidence used by Ofcom in this second consultation when added to that outlined in the first consultation?

The first consultation attempted to estimate the beta for BT's copper access network using comparisons with UK utilities, US telecommunications companies and income elasticity data. Energis believe that investigating all three of these data sources was a reasonable approach to proxying the level of BT's access beta. The UK utilities, though not replicas of the telecoms access network, share many demand similarities as well as having the advantage of being a measure based within the UK. US telecommunications companies which are primarily locally based, are also likely to have similar betas to BT's access network, though have the disadvantage of not being based within the UK. Similarly, the data on income elasticities data should indicate to some degree the volatility of revenues of various parts of BT in response to changes in income (which should proxy the economic cycle and so potentially indicate whether sub-sections of BT are more or less risky than BT group as a whole). We believe that all three of these methodologies suggest that the access network has a lower beta. Our only issue with the overall analysis was that we believed that the final results derived by Ofcom were biased upwards, given that the group beta for BT was too high.

In the second consultation Ofcom responds to criticisms by a number of industry players about the estimation methodology used in the first document and re-examines the question of disaggregation by undertaking a first principles analysis, regression analysis and examination of regulatory precedents. Much of the detail of this work appears to have been undertaken by PWC on behalf of Ofcom. We believe that this extra work adds to the analysis in the first consultation and further supports disaggregation of BT's beta.

Energis agrees with Ofcom and PWC that 'a first principles assessment of the size of the beta for the access business needs to consider the extent to which the variations in the profits or cash flows of the business are correlated with variations in general market returns'[16] We believe that PWC's analysis of the access business relative to other parts of BT Group, strongly suggests that the former is less exposed to the economic cycle – mainly due to the fact that customers will not disconnect lines as the economy contracts and reconnect lines as the economy expands. We agree with PWC that there may be some cyclical effects re number of lines per customer but suggest that (as also noted) the impact of broadband will increasingly reduce the need for residential customers to purchase a second line – so reducing the impact of this factor. In contrast, volumes of calls and services provided by BT's ICT business (desktop and network equipment and software etc) are much more likely to be sensitive to levels of economic activity (i.e. they are more easily scaled back as demand contracts). We also note that PWC in its report believes that the latest evidence on income elasticities of demand for access also support this first principles analysis.

Where the regression evidence is concerned, we agree with PWC that there is 'good directional evidence that the beta for BT's copper access business is lower than that for the other parts of BT.'[17] We accept that no precise measurement has been derived regarding the level of the difference between BT Group and the access network and that any

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[16] second paragraph page 10 'Disaggregating BT's Beta' PWC, June 2005
[17] page 24 'Disaggregating BT's Beta' PWC, June 2005

difference may not be of a large amount. We also strongly support PWC's comment that 'any calculation of beta involves a degree of judgement (for example, concerning what measure of beta to use, which comparators to consider etc). There is, for example, no precise accepted estimate of BT's group beta available to Ofcom but nevertheless Ofcom needs to adopt a figure in order to apply the CAPM framework in setting regulated prices'[18]. This area is always a matter of judgement.

Therefore we believe that all of this evidence, when combined with the type 1 and type 2 analysis undertaken by Ofcom, suggests that the risk of not disaggregating BT's beta (where disaggregating is the correct way forward) verses the risk of disaggregating (where disaggregating is not the correct way forward) strongly suggest that disaggregating BT's beta is the least risky option and should be pursued.

<u>Should BT's equity beta be disaggregated into two or three categories?</u>

Energis agrees with Ofcom's decision to split BT's beta into two categories, rather than three. Although we question some of the analysis (in that it uses a group beta which has in our view been over estimated), we accept that when determining whether there should be two or three categories, 'the single key factor …is whether 'other regulated' activities (e.g. fixed geographic termination) are more or less risky than BT group as a whole, and whether this view is supported by available evidence'[19]. Energis agrees with Ofcom that it is not always particularly clear whether this is the case and that deciding which products would be in medium or high risk groups would be difficult and subjective.

We are also unsure – though this is not mentioned by Ofcom - what type of proxy group of companies could be used to objectively measure a 'reasonable' beta for the high risk group. Given the analysis in the previous consultation, we assume that Ofcom would have to assign a rate of return to this group according to what was 'left over' after de-averaging access and setting the middle group at the group beta rate. We are not sure that this would be adequate. One possibility would be to use ICT (as identified in the PWC document) but this is probably as fraught with difficulty i.e. would all the 'rest' BT products be classed as ICT?

Hence we agree that two groups are probably better than three – given the problems of identifying which products would be in the middle or high risk groups and the problems of assigning appropriate betas to the high risk group.

Question 11: Based on the available evidence what do respondents think would be an appropriate level of disaggregation for the equity beta of BT's copper access network? Which of the following levels would be most appropriate: (a) 0.3 points below the group average; (b) 0.2 points below the group average; (c) 0.1 points below the group average; (d) 0 points below the group average?

[18] Pages 28 and 29 'Disaggregating BT's Beta' PWC, June 2005

[19] para 4.53 'Ofcom's approach to risk in the assessment of the cost of capital – Second consultation' 23rd June 2005

Energis believes that setting the beta for the access network 0.2 points below a group average of 1.0 is the correct approach. We believe that 0.8 is in the range of what would be a reasonable estimate for the overall BT group beta (given the findings of the Brattle group summarised in Table 6 of that document). Further we also believe that a 0.2 point difference is significant enough to affect prices to end customers but is still small enough to be viewed as a cautious approach – given the directional evidence provided by PWC.

Question 12: What is the view of respondents on Ofcom's proposed estimates of the WACC for BT's copper access business and the rest of BT?

As outlined in this letter, Energis believe that Ofcom has taken an overly cautious and conservative approach to the estimation of many of the variables used within the calculation. As a result many of these are too high, and the proposed estimates of the WACC for the copper access business and the rest of BT biased upwards.

It would be useful and informative for Ofcom to produce two estimates of each WACC i.e. a WACC where all the assumptions were conservative and a WACC where the assumptions had any conservative upward bias removed. This way Ofcom and industry could assess the effect of all the conservative assumptions overall.

As already noted, we agree that the process of deriving the WACC is a matter of judgement and should not be mechanistic. However, we also believe that Ofcom have consulted on this topic on a piecemeal approach i.e. that all the different variables used to calculate the final WACCs should be considered together in a balanced holistic approach rather than in separate consultations.

<u>Non-application of lower access beta to PPC tails and WES</u>

Energis were very concerned that Ofcom has indicated that PPC tails (and presumably WES) may not benefit from the lower access beta. From the conversation in the Ofcom UKCTA meeting we believe that the basis for this is that Ofcom considers such services more risky because they are more competitive.

Energis believes that PPC tails and WES are similar to other types of access. Businesses will not wish to disconnect access to various parts of their business as a result of a downturn in economic activity. Nowadays access across sites is essential to business operations and disconnection would not be viewed as a feasible means of 'cost cutting'. Therefore like other forms of access available over copper, access over fibre or copper via higher bandwidths is an essential, mature service. We accept PWC's comments about variations in number of lines as opposed to number of connections and that in an economic upswing 'a business might decide to invest in an additional line to reduce instances of customers being unable to make contact, and more businesses might start up.'[20] However, we do not believe that this renders the 'riskiness' of PPC tails or WES significantly different to that of other types of access. We agree with PWC that 'this first principles assessment of copper access wholesale business revenue suggests that it is relatively uncorrelated with the economic cycle

[20] page 10 'Disaggregating BT's Beta' PWC, June 2005

compared with most of BT's revenue streams, given that demand for fixed network access is relatively stable'[21]

We also believe that the fact that there is competition to BT in the provision of PPC tail circuits or WES does not necessarily mean that BT's beta for these services is affected. As PWC note in their analysis of copper access, for competition to imply that there was more systematic risk, 'it would be necessary that in an economic upturn customers would tend to switch from cable providers to BT, with the reverse happening in an economic slowdown. There does not seem to be any reason to think that this would be the case.'[22] We believe that the same arguments would hold in relation to PPC tails and WES.

Finally if risk is assessed from the perspective of the underlying asset, this further supports our argument that PPCs and WES are no more risky than other forms of access. In other words, these assets can always be re-used to supply other customers in the local area.

It would be useful to get clarity on the full rationale behind Ofcom's decision – particularly as it will result in the new ASD having different rates of return for different services it produces. We are not clear that this is either a consistent or useful way forward.

<u>Summary</u>

Energis welcomes the opportunity to comment on the latest consultation by Ofcom on the cost of capital. We believe that a re-examination of BT's overall group beta was vital and that the evidence shows that a value of 1.0 is a reasonable and cautious estimate for this variable.

Energis also believes that disaggregating the beta into two rather than three categories is the correct approach at this stage. Evidence from the first and second consultations both strongly support the use of a lower beta for the access network.

We urge Ofcom to be less cautious when estimating many of the variables within the WACC calculation as we believe that the current approach biases the WACCs upwards. UK businesses and consumers will therefore end up paying too high a price for these services.

Finally we believe that more detail should be provided about the rationale for excluding PPC tails and WES from the category of access products which will receive the lower cost of capital.

Yours sincerely,

Rachel Brennan
Regulatory Manager

[21] page 12 'Disaggregating BT's Beta' PWC, June 2005
[22] page 12 'Disaggregating BT's Beta' PWC, June 2005