Regulated Costs for BT's Copper Cable

A REPORT PREPARED FOR SKY AND TALKTALK

January 2014

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Contents

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Executive Summary

The current treatment of copper cable used for the calculation of the costs of MPF/WLR services does not recognise that at the end of its useful working life, copper cable has material scrap value. As a result when BT recovers copper cable, as it has already started to do for the MUCJ network[1], BT's shareholders enjoy a windfall gain at the expense of past customers who paid higher prices for regulated services than appropriate. This effective transfer from customers to BT's shareholders will distort incentives for customers, competitors and investors leading to inefficient outcomes.

The scrap value of the copper is highly material – the potential cash generated, net of extraction costs, is probably over £1bn. By properly taking into account this residual value, not only will customers benefit in the short term, but it will enable efficient consumer decisions regarding the choice between copper and fibre based products, improving productive efficiency.

Notably, BT's current treatment of copper cable in the regulatory accounts does not only lead to inefficiently high prices but it is inconsistent with the principles outlined in BT's regulatory accounting documentation, BT's annual report and in the International Accounting Standards.

The correct approach, based on depreciable value, is straightforward to implement on a forward looking basis. However, moving directly to a depreciable value approach now would result in a holding gain for existing assets. If this holding gain were not passed on to consumers it would simply bring forward some of the windfall gains to BT's shareholders related to the scrap value of copper.

We propose two alternative methodologies for treating existing assets and phasing in a move to a depreciable value approach:

- Option A, which is consistent with and based on accounting standards, reduces the future depreciation of existing assets to take account of the residual scrap value of those assets; and
- Option B, is similar to option A except inasmuch that future costs are reduced to reflect historic over-payment by customers in the past, even where the current carrying value of assets is below the residual value of the corresponding copper cable.

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1 The MUCJ network consists of the cables junction (CJ) network, which connects local exchanges to each other and to their parent trunk exchange for long-distance calls and the main underground (MU) trunk network, which connects trunk exchanges to each other.

For practical reasons Option A is our preferred approach.

In this report we first set out the background to the issue in Chapter 1. We then explain how the correct approach to copper cable depreciation can be implemented in Chapter 2, with some illustrative examples. Finally, in Chapter 3 we present the two alternative methodologies outlined above, again with illustrative examples.

1 Background

1.1 Copper cable

The access network between BT's local exchanges and customer premises used by Openreach to deliver wholesale line rental (WLR) and local loop unbundling (LLU) services is based on copper cable. The copper cable consists of pairs of copper wires with insulation between them to allow separate electrical signals to be sent down each copper pair.

Over time, copper cables will physically degrade, as the insulation surrounding the copper wires breaks down. This decreases the quality of the service due to interference between adjacent copper pairs. This means that, at a certain point, the cable will need to be replaced. For regulatory purposes an assumed asset life of 18 years is used.[2] This assumed asset life was based benchmarks from other EU jurisdictions, with BT stating that the design life of copper cable is 20 years.

The calculation of the Regulatory Asset Value (RAV) used to set WLR and LLU prices assumes a 'write out' of the copper cable assets after 18 years, with the value of these assets being set to zero at this point in Gross Replacement Cost (GRC) and Net Replacement Cost (NRC) estimates. However the copper cable will not generally be removed at this point. Indeed BT has noted that only a small proportion of local access copper cable is recovered each year due to maintenance and repair work – so called business as usual (BAU) scrap. The majority of the cables cannot be recovered as they continue to be used to deliver services[3]. However, at some point in the future, it is likely cable will be removed and the copper within the cables recovered and recycled. At this point BT would receive a cash payment when it sells the scrap cable. This would reflect the value of the copper in the cable, less the cost of extracting the copper.

The potential net cash flows to BT from copper scrap are very material – probably over £1bn. There are approximately 28 million copper pairs in the BT access network and an average copper pair in BT's network has a length of around 3.5 km and contains around 12 kg of copper[4]. Applying current copper scrap prices the scrap value (excluding extraction costs) of the local access copper cable network could be of the order of £1.5 billion[5]. This seems broadly

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2 Ofcom : Valuing copper access Final statement 18 August 2005, paragraph 5.10

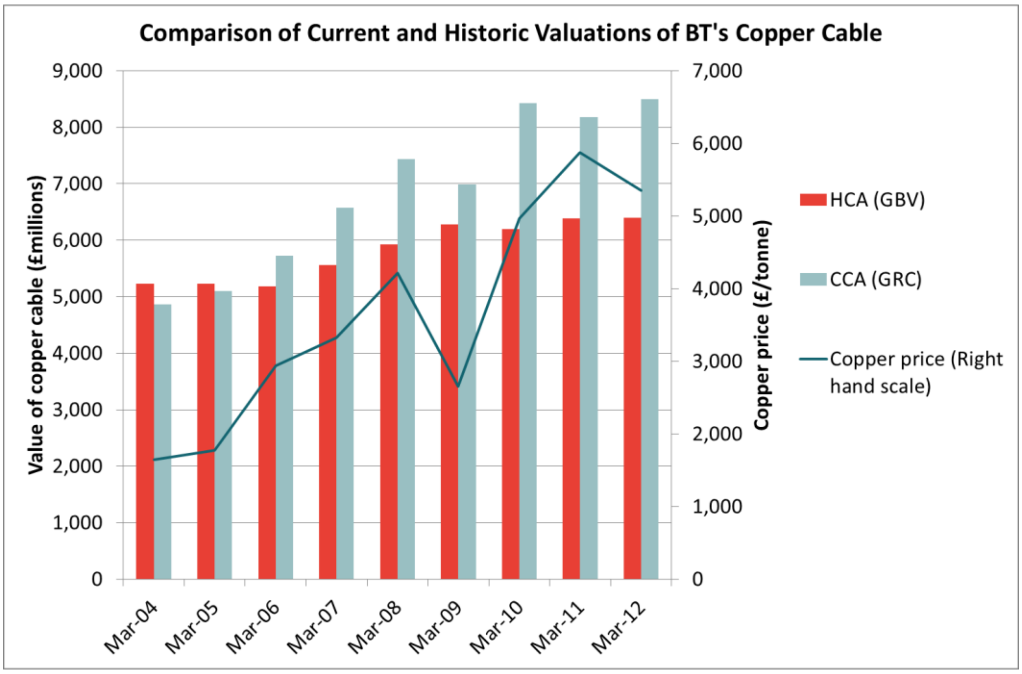
3 References under section 193 of the Communications Act 2003 British Telecommunications Plc v Office of Communications Case 1193/3/3/12 and British Sky Broadcasting Limited and TalkTalk Telecom Group Plc v Office of Communications Case1192/3/3/12 paragraph 4.21

4 This assumes 0.5 mm gauge copper wire.

5 The majority of the cable (approximately 80% by value) is in the e-side network between exchange buildings and street cabinets.

consistent with an increase of £2 billion in the difference between the gross replacement cost and the gross book value of BT's copper cable network in the last decade as the price of copper has risen more than threefold. Taking into account the extraction costs, cash generated might be about £1bn. This is about 20% of the initial cost of installing the network (gross book value).

Figure 1. Valuation of BT's Copper Cable

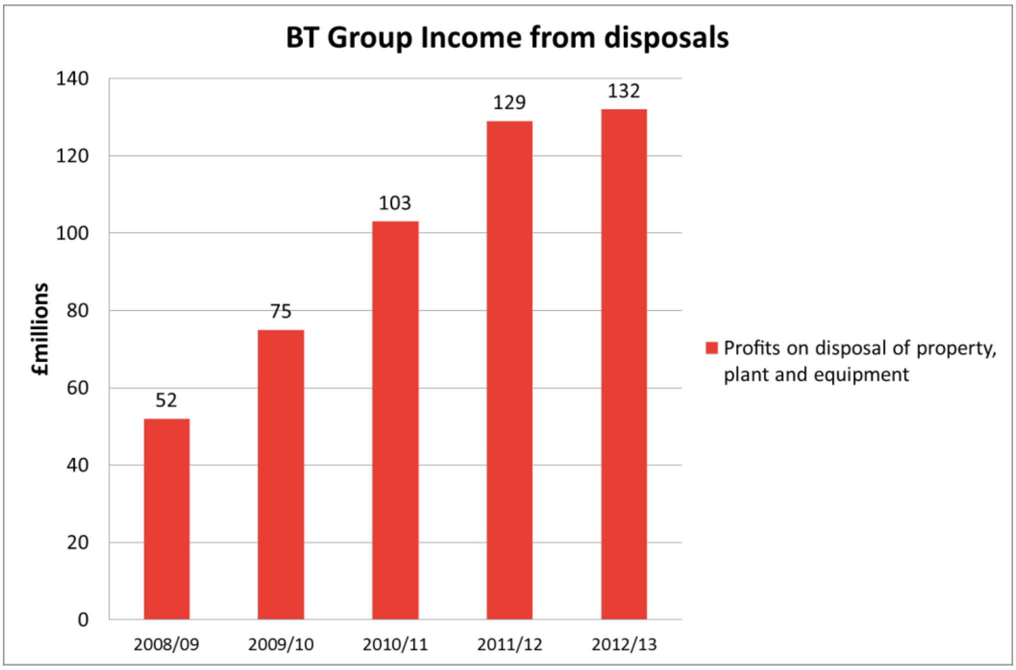


Source: LLU/WLR Charge Control RAV Model

BT has been recovering and selling copper cable installed outside of its local access network, principally the MUCJ network, which was a legacy network running between exchange sites. The figure below shows BT's reported profits on disposal of property, plant and equipment which includes the proceeds of copper recovery programmes[6].

6 As well as a small amount of BAU copper scrap.

Figure 2. Profits on disposals



Source: BT Annual Reports

Profits on disposal of property, plant and equipment has increased steadily from 2008/09 to 2012/13 with an increase of 37% between 2009/10 and 2010/11. The 2011 BT Annual Report states *"[t]he increase in 2010 was principally due to an increase in the profit on sales of scrap and cable recoveries due to increased copper market prices and supplier settlements."* [7]

When setting charge controls for the services that currently use copper cables, an incorrect treatment of the potential future cash flows from copper cable recovery costs could lead to a number of efficiency losses:

- if prices are set during the lifetime of the copper access network that do not take account of the potential cash generated by recovering copper cable then prices will be set above an efficient level[8] reducing demand and hence allocative efficiency;

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7 BT Annual report 2011, page 47

8 Reflecting prices being set above a level required for BT to fully recover efficiently incurred costs.

- the treatment of copper recovery could distort BT's investment decisions with respect to fibre investment potentially leading to a reduction in dynamic efficiency; and
- under a CCA approach, volatility in copper prices can feed through to depreciation charges as these charges reflect the changing replacement cost of copper (even though the copper itself is not fully consumed over the life of the cable but can be recovered afterwards). The resulting volatility in final prices could potentially lead to unnecessarily elevated churn rates as customers connect and disconnect more than they would otherwise thus increasing overall costs.

When determining the appropriate cost base for services that use the current copper cable network, Ofcom would need to take account of the potential scrap value of the copper network in order to set efficient prices.

One alternative to reducing the depreciation charge during the life of the asset would be to instead return the cash generated from scrap to customers as the copper cable is recovered. However, this is less efficient for a number of reasons:

- the products (MPF and WLR) which used the cable will (by definition) no longer exist when the network is scrapped so the income will need to be returned to customers via different products;
- there would be a mismatch between costs and benefits across cohorts of customers, with the inflated prices being paid by customers of existing products (e.g. MPF/WLR) being offset by subsidised prices for customers of other products;
- BT's incentive to scrap the network will be reduced if it knows that the income it generates will be returned to customers, effectively weakening cost minimisation incentives; and
- given that Ofcom cannot typically fetter its discretion by making such an assumption in advance, there would be increased regulatory uncertainty for BT, CPs and consumers.

1.2 Current Accounting treatment of copper cable

In BT's Regulatory Financial Statements (RFS), the depreciation profile for copper cable assets fails to take into account the fact that copper in the network is expected to have a significant 'residual value', i.e. copper cable asset values are reduced to zero by the end of their economic lives. In other words, BT's approach does not reflect the fact that the copper within these cables will at some point be sold in order to recover its inherent value.

Correspondingly, the approach used for the copper cable assets in the RAV calculations used to set the LLU-WLR charge controls also does not take into account the residual value:

- for assets purchased after August 1997, the RFS CCA approach is used; and
- for assets purchased before August 1997, a HCA approach is used which assumes that copper cable is fully depreciated over 18 years.

The RAV for copper cable should converge to the CCA value by August 2015[9], as all pre-August 1997 cable will have reached the end of its assumed asset life at this point. This means that the next proposed charge control, based on a glide path to forecast unit costs in 2016/17, will be based on capital costs of cable estimated on a CCA basis.

1.2.1 Other operating income

Based on the current depreciation approach, BT may make large profits on disposal when copper cable is scrapped. This would reflect the difference between the net sale proceeds and the carrying value of the assets. If the copper cable is recovered more than 18 years after installation based on the current depreciation profile the carry value would be zero and the full net scrap value would be recognised as a profit on disposal.

Unless this profit on disposal was returned to customers through reduced prices, this profit on disposal would result in an increase in shareholders' funds, over and above that needed to compensate investors for the initial investment.

1.3 Correct accounting treatment

BT's current treatment of copper cable in the RFS is inconsistent with the approach outlined in its regulatory accounting documentation, international accounting standards and its own annual report.

According to BT's own regulatory accounting documentation:

> *"Depreciation is provided on tangible fixed assets on a straight-line basis from the time they are available for use, so as to write off their costs over their estimated useful lives, taking into account any expected residual values."*[10]

9 The asset life of copper cable used in the RAV is 18 years.

10 BT Current Cost Accounting Detailed Valuation Methodology 31 July 2013, Section 1.10

This is consistent with IAS 16 ('International Accounting Standard') "Property plant & equipment"

> *"Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life.*
>
> *Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value."*

BT's accounts (2013 Annual Report) states:

> *"Included within the cost for network infrastructure and equipment are direct and indirect labour costs, materials and directly attributable overheads. Depreciation is provided on property, plant and equipment on a straight line basis from the time the asset is available for use, to write off the asset's cost over the estimated useful life* ***taking into account any expected residual value****. Freehold land is not depreciated*
>
> *Residual values and useful lives are reassessed annually and, if necessary, changes are recognised prospectively."*[11] [Emphasis added]

This implies that the depreciation methodology actually being applied to the copper cable assets in the RFS is inconsistent with BT's stated approach for its statutory accounts and the approach set out in BT's supporting documentation for its regulatory accounts.

1.3.1 Impact of correct approach

If the depreciation took account of the residual value, as set out in the international accounting standards and BT's own documentation, then the effect will be lower depreciation charges over the life of the asset. There would be no expected profit on disposal, as the carrying value of assets would be equal to the residual value of the asset.

While the reduced depreciation charge would be partially offset by a higher asset value and hence higher return on capital employed, overall regulated charges will be lower reflecting the fact that only the depreciable part of the copper cable will be recovered from customers.

Such an approach would be appropriate whether there is an expectation that the copper network will be largely obsolete in the medium term or whether costs are calculated on the assumption that the network is in a steady state (e.g. an anchor based pricing approach). In both cases the copper cable currently in service will be available to be recovered at some point in the future, either because of obsolescence or because it will need to be replaced due to physical degradation.

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11 BT Annual Report 2013 page 111

Therefore, under BT's current approach, prices will be higher than they should be during the lives of these assets, as the full cost of the asset will be recovered during the life of the assets taking no account of the expected benefit of the cash generated from selling the copper cable at the end of its life.

Higher prices will lead to reduced demand and hence allocatively inefficient outcomes.

Moreover, adopting the correct approach will encourage better decisions on when the copper network should be switched off. Under BT's current approach, as the copper network is depreciated to zero the charge for MPF will also fall towards zero. However, this does not recognise the opportunity cost of a fully depreciated copper network, where continued use of the network prevents the copper being recovered.

An approach where the carrying value of the asset does not fall below the recoverable value provides the correct pricing signals to consumers, by including residual values plus a return on capital (i.e. WACC times residual value) in the calculation of allowable revenues. This properly reflects the opportunity cost of keeping the copper in the ground and not recovering it. This dynamic will become important when BT begin to consider whether to recover the copper. Under the current approach MPF/WLR prices will over-estimate the genuine cost of the network (i.e. the opportunity cost). Therefore migration between networks and hence the decision of when to scrap the copper network will be distorted.

2 Implementing a depreciable value approach

2.1 Methodology

2.1.1 Accounting guidance

The international accounting standards are clear that only the depreciable value (i.e. gross value less the expected residual at the end of an asset's useful economic life) should be used to calculate depreciation charges.

The current accounting guidance states that the residual value of an asset should reflect the current net value of the asset today, if it was of the age and expected condition at the end of its useful economic life[12]. In other words, it is not necessary to estimate and project the value forward to the point at which it might be scrapped, but rather depreciation charges can be set on the basis of the current scrap value. In this case, this is a conservative approach as, with the high variability of copper prices, the real option to defer recovery if copper prices are relatively low will have significant value[13].

The scrap value would need to be reassessed annually, in a similar way to the revaluation of assets in a current cost approach. Indeed under a CCA approach both acquisition cost and residual value would be expected to move in line with copper commodity prices, meaning that the net effect of changes in copper prices on depreciable value would be relatively small.

2.1.2 Decomposition approach

Implementing a residual value approach is theoretically straightforward. There are two potential practical complications:

- the variation in copper scrap prices over time mean that the residual value will change over time; and
- under a CCA approach the depreciation charge should change over time reflecting price movements on the depreciable element of the copper cable.

Both of these complications can be addressed by decomposing copper cable assets into two components:

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12 *"The residual value of an asset is the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life".* (IAS 16)

13 For example as evidenced by BT choice to recover copper in the obsolete MUCJ network when the copper price had increased significantly.

- a depreciable value element[14], which depreciates over the 18 year asset life to zero, and whose gross asset value moves in line with inflation, as the impact of copper commodity price movements would largely net out as explained above; and
- a residual value component[15], which does not depreciate and whose asset value moves in line with copper scrap prices.

Below we provide an illustrative example of results from this approach showing the impact if such an approach had been implemented consistently in the past (i.e. that this approach had been implemented from the point at which the assets were acquired).

2.1.3 Inputs

We have used a common set of inputs for the illustrative examples in the rest of this paper.

Data

We have taken data from Ofcom's RAV model:

- Capital expenditure on copper cable from 1991/92;
- Information on copper cable price movements from 1997/98.

Earlier data was not available and as such the illustrative example does not reflect the total asset base.

We have used the RPI to estimate price changes for the depreciable element of copper cable, as we would expect that cost of this element to move broadly in line with general inflation.

Forecasts

We have used the forecasts of capital expenditure and copper cable inflation in the RAV model.

Assumptions

We have used an asset life of 18 years for copper cable and for the depreciable element of copper cable.

We have applied a CCA approach to all assets for simplicity rather than attempting to apply a RAV adjustment[16].

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14 Which can be considered to be the non-copper elements of the cable acquisition cost (insulation, installation costs, etc.).

15 Which can be considered to be the copper within the cable.

An assumption was made about the proportion of the current 2013/14 value of copper cable that was depreciable – 80%[17].

We assume that copper cables are not extracted during the forecast period, even where they have reached the end of their economic life.

2.1.4 Decomposition of value into depreciable and residual value

Under the assumption that this depreciable value had moved in line with inflation, we decomposed the price variance estimates in the RAV model into the component that was due to changes in the residual value and those which were due to changes in the depreciable value. This decomposition is shown below with the majority of the volatility in the overall price variance being attributed to the residual value component[18].

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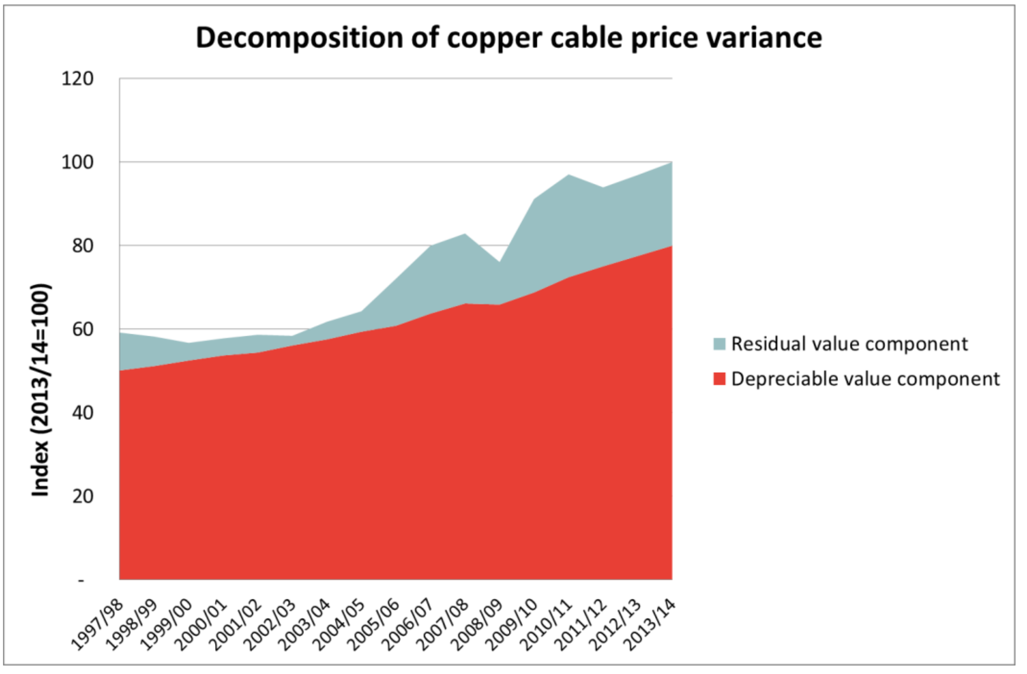
16 By August 2015, all pre-August 1997 copper cable assets will be fully depreciated and as such the RAV adjustment after this data should be zero, i.e. allowable revenues will be based solely on CCA valuations.

17 An estimate of the current scrap value of the network could be made based upon the estimate of the total volume of cable in BT's network, for example that used in the direct CCA valuation, and estimate net scrap value of different types of cable.

18 The reduction in depreciable value in 2009 reflects the negative RPI in this year.

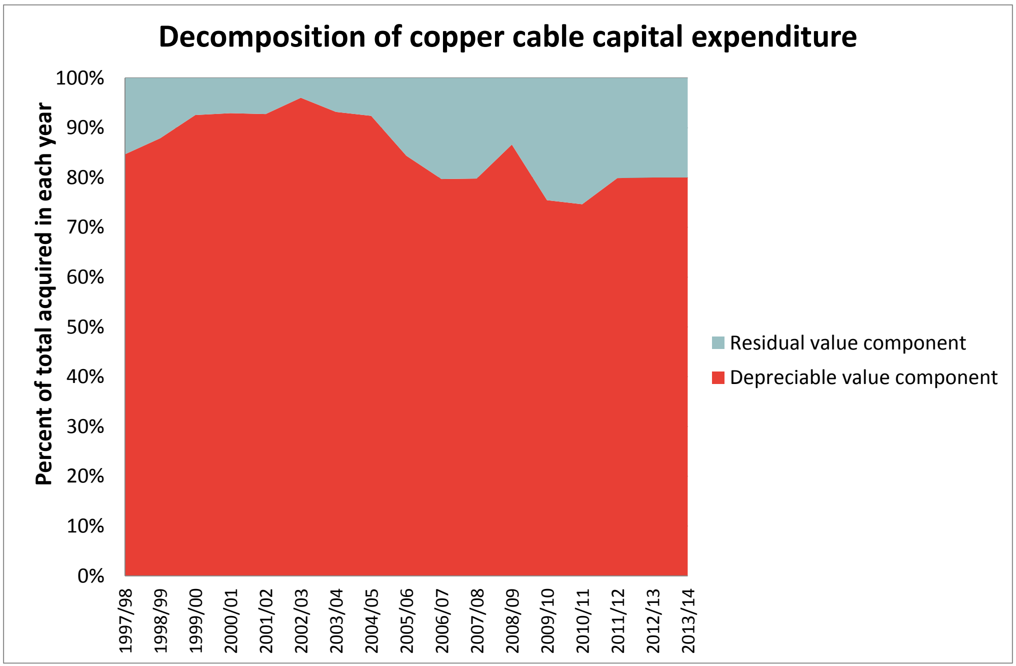
Figure 3. Decomposition of price variance



Source: Frontier

In addition, this decomposition allows us to estimate the proportion of copper cable acquisition costs that were depreciable and residual in different years. This shows that for some periods the value of the copper cable on acquisition was almost entirely depreciable, as scrap values were low at this point, but as scrap values have increased a material proportion of the acquisition value would be recoverable.

Figure 4. Split of capital expenditure



Source: Frontier

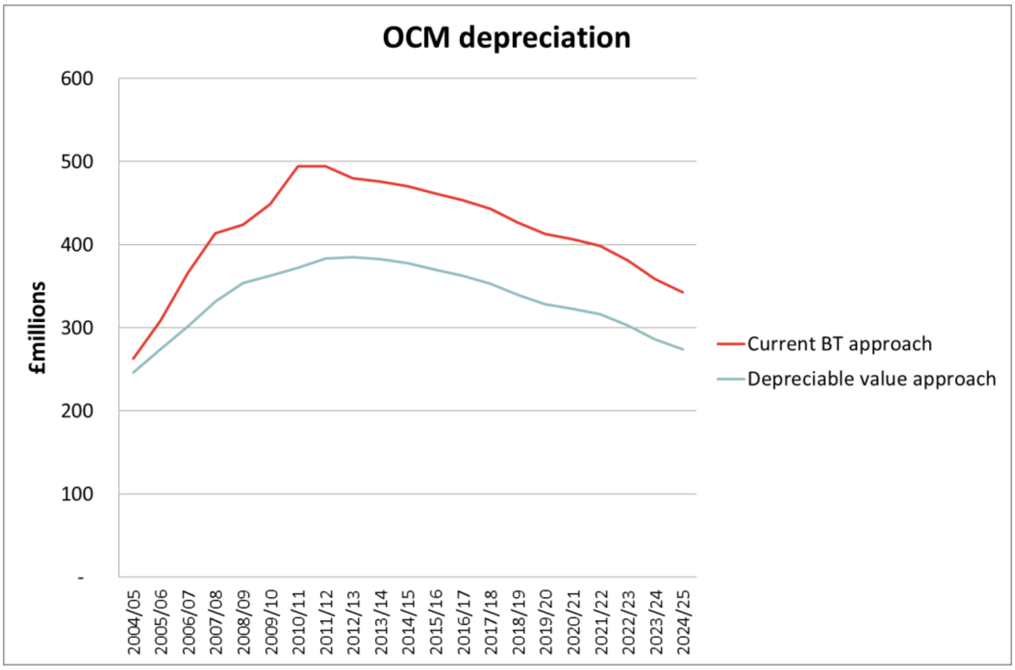
2.2 Results

Below we present some illustrative results, contrasted with a CCA calculation using identical inputs, based on the BT assumption that copper cable is fully depreciable.

2.2.1 Depreciation charges

By excluding a part of capital expenditure relating to the residual value component from the depreciation calculations, the overall level of depreciation is lower than the equivalent CCA value. In addition as the volatility in copper prices does not feed through into these lower depreciation charges because they relate only to the non-copper, depreciable value element, there is no increase in depreciation charges driven by copper cable price increases.

Figure 5. Comparison of depreciation charges[19]



Source: Frontier

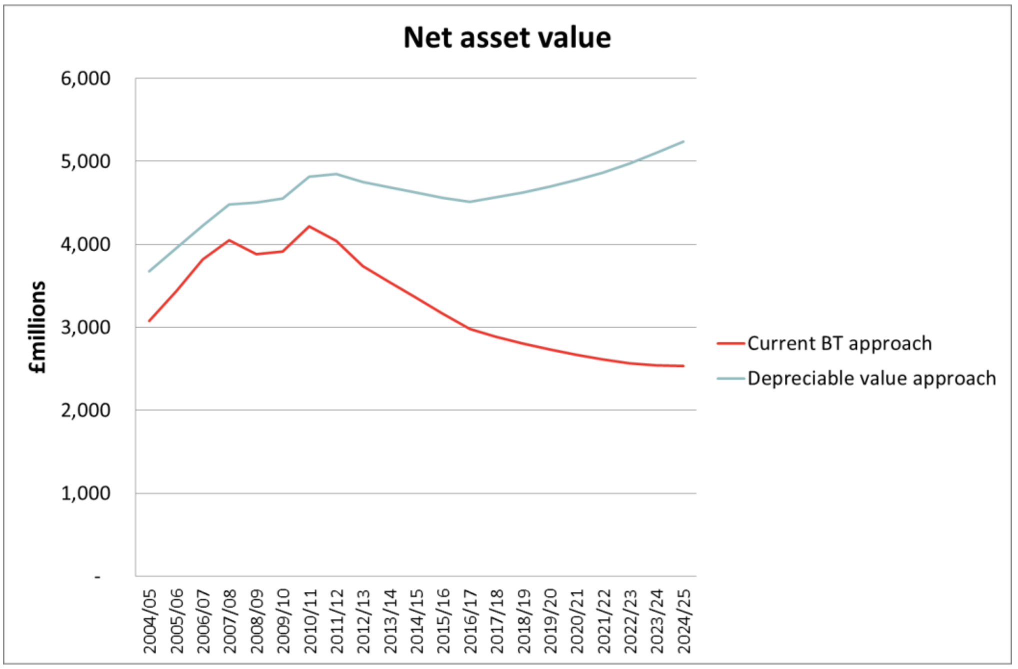
2.2.2 Net asset value

As the residual value element is not depreciated, the net asset value is greater under a depreciable value approach and continues to rise as the amount of recoverable copper increases and the value of the recoverable copper increases in line with inflation.

The difference in net asset value reflects the residual value that is included in the asset base under a depreciable value approach but which is not included in the BT approach, as the full value of the assets has been recovered from consumers. This then reflects the level of windfall gains that would be available were BT to scrap the copper network.

19 On an operational capital maintenance (OCM) basis, i.e. without including charges to the income statement to reflect holding gains and losses.

Figure 6. Comparison of net asset value



Source: Frontier

2.3 Conclusion

This exercise demonstrates that a depreciable value approach can be implemented easily and produces results which are intuitively reasonable. However, as Ofcom recognised in implementing the RAV adjustment, to adjust for the move from HCA to CCA valuation, moving between different regulatory depreciation approaches during the lifetime of an asset[20], can result in over- or under-recovery of costs.

In the case of a hypothetical move from the current approach to one based on a depreciable value approach, the resulting higher net asset value under a depreciable value approach would lead to a holding gain. This would result in an over-recovery of costs unless this holding gain was reflected in reduced regulated prices. Effectively BT would gain from higher depreciation charges before the change and a higher cost of capital (i.e. net asset value times WACC) after the change allowing it to over-recover the costs of its investments. A resulting increase in the net present value of future costs/prices as a result of recognising future scrap value would be perverse.

20 In the case of the RAV adjustment, the move from HCA to CCA depreciation in 1997.

In the following section we set out two potential methodologies allowing a transition towards a depreciable value approach without introducing a one off holding gain.

3 Moving to a depreciable value approach

In this section we compare two methods of moving towards a depreciable value approach from the current asset value. The approaches result in prices which are closer to an efficient level, without introducing holding gains.

The two approaches are:

- Option A, based on the accounting guidelines, where for existing assets, the current asset carrying values are used, with future depreciation charges taking account of the residual value; or
- Option B where the over-recovery to date is estimated and adjusted for over a period of time by reduced depreciation charges.

The implementation and results of these two approaches are detailed below.

3.1 Option A

3.1.1 Accounting guidance

BT's existing accounting policies state that residual value should be taken into account when determining depreciation charges. As a result a move to a depreciable value approach could be considered as a change in inputs, with a new estimate that the residual value of copper cable is greater than zero, rather than a change in accounting policy.

The accounting approach to such a change in estimation is to maintain the carrying value of the assets[21], but to adjust forward looking depreciation to take account of the new information.

The IAS 16 explains that where the carrying value of an asset falls below the residual value, depreciation should not be charged until such time as the residual value declines. Given that some of the copper cable assets are already significantly depreciated and copper prices are unlikely to fall in the near future, a proportion of these are likely to end up with a carrying value below residual value at the end of their useful economic lives.

3.1.2 Implementation

The implementation of the approach depends on when the asset was purchased:

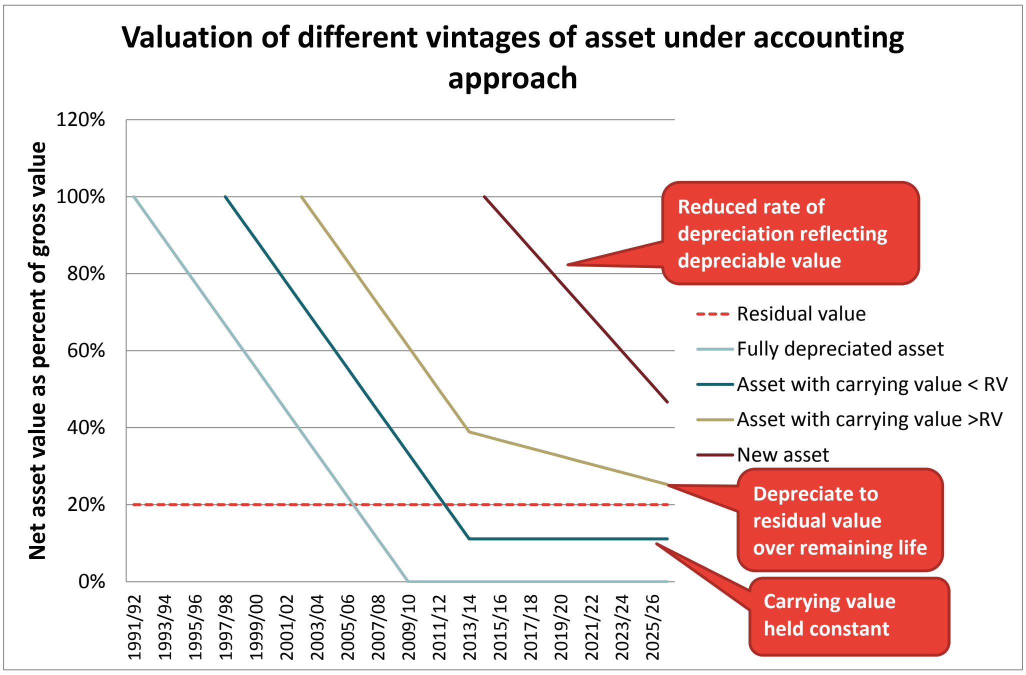
- for assets purchased in the future, the depreciable value approach would be applied;

21 Note that carrying value is equivalent to net replacement cost in this context.

- for assets purchased in the past but whose carrying value is greater than the estimate of the residual value at the time of the change in approach, depreciation charges would be adjusted on a forward looking basis so that the value of the asset declines to the residual value at the end of the asset's assumed working life;
- for assets purchased in the past whose carrying value is positive but less than the estimated residual value, no depreciation charge would be applied, i.e. the current asset value would be maintained; and
- no change would be made to the treatment of fully depreciation assets which would remain at zero.

This approach is illustrated below

Figure 7. Illustration of implementation of accounting approach



Source: Frontier

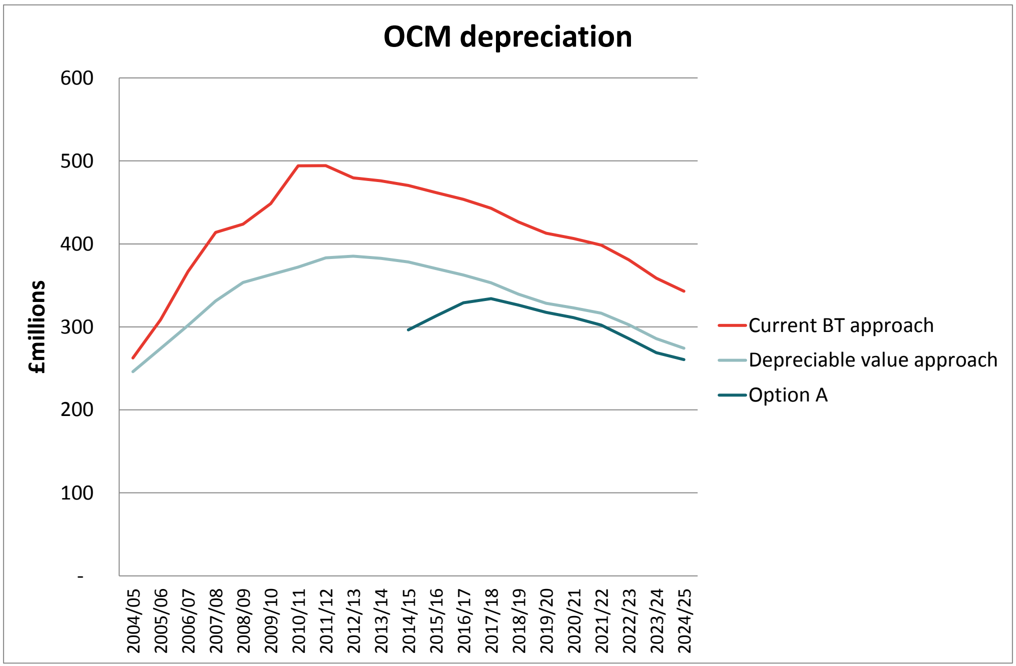
3.1.3 Results

Depreciation charge

This approach results in a depreciation charges below that of a depreciable value approach as existing assets are either not depreciated or are depreciated at a lower rate than if they had been valued based on a depreciable value approach since acquisition.

Moving to a depreciable value approach

Figure 8. Depreciation under Option A

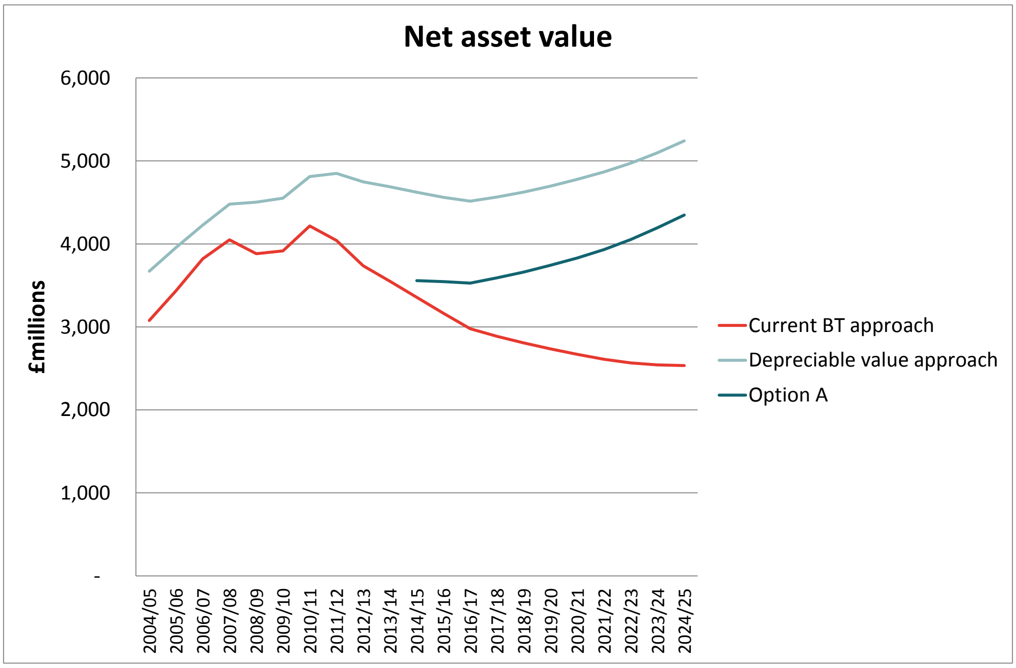


Source: Frontier

Net asset value

Under this approach the net asset value increases, reflecting the residual value of those assets not fully depreciated when the change in approach is introduced. However the asset value will still lie below that of a depreciable value approach applied consistently, as some assets will still be valued below their scrap value. For these assets BT could expect a profit on disposal when they are finally recovered.

Figure 9. Net asset value under Option A

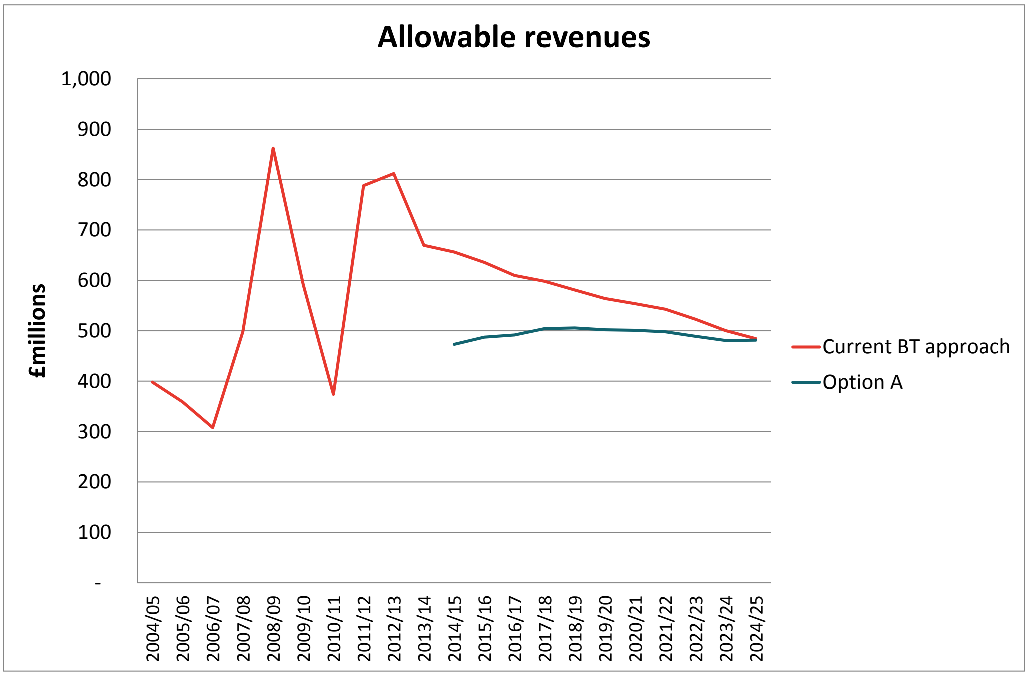


Source: Frontier

Allowable revenues

Under this approach allowable revenues, being the sum of financial capital maintenance (FCM – including holding gains/losses in the calculation of charges) depreciation and a return on capital employed, are below those of the current approach. However the two series converge over time due to the higher asset valuation under Option A which leads to a higher return on capital employed component.

Figure 10. Allowable revenues under Option A



Source: Frontier

3.1.4 Assessment

Option A has a number of strengths:

- it allows a move to a depreciable value approach without introducing windfall holding gains for BT;
- for future asset purchases the allowable revenues will fully reflect the depreciable value approach;
- it is consistent with accounting guidelines; and
- it allows for some repair of the inflated depreciation in past years, by adjusting the future depreciation profile of those assets purchased recently.

The main disadvantage of Option A is that it does not take account of inflated depreciation charges in the past for assets which are now fully depreciated, or which are near the end of their assumed working lives. As a result for these assets, there would still be profits on disposal when the corresponding cables are recovered. This would lead to over-recovery of costs, unless there was a mechanism for reducing forward looking prices to reflect this profit.

3.2 Option B

3.2.1 Rationale

Option B is based on a depreciable value approach (as if a depreciable value approach had been implemented from when the assets had been acquired) but with an additional adjustment to prevent any holding gain from the change in approach, with the adjustment being phased out over time.

Under this approach, an estimate would be made of the difference between the current carrying value of copper cable assets (in the RAV) and the correct carrying value from a depreciable value approach. This would form the basis of a downwards adjustment that would be applied to the asset value calculated on a depreciable value approach. This adjustment would be reduced (amortised) over a set period of time to zero. As a result the carrying value under this approach would converge to the correct depreciable value approach – effectively a glide path to the correct level.

The adjustment would effectively be a liability of BT to its customers which would be repaid over a number of years. The amortisation of this liability would be recognised as a negative charge, thus reducing the allowable revenues over the period.

3.2.2 Implementation

The implementation is in theory straightforward:

- the net asset value under a depreciable value approach, including the scrap value of fully depreciated assets, would be estimated;
- the liability would be calculated as the difference between the current RAV value of copper cables and the value under a depreciable value approach;
- the liability would be amortized over a determined period of time;
- the net asset value would consist of the net value under a depreciable value approach less the carrying value of the liability; and
- the depreciation charges would consist of the depreciation charges under a depreciable value approach less the amortisation of the liability.

Under a current cost approach the liability could be revalued annually according to movements in copper scrap prices.

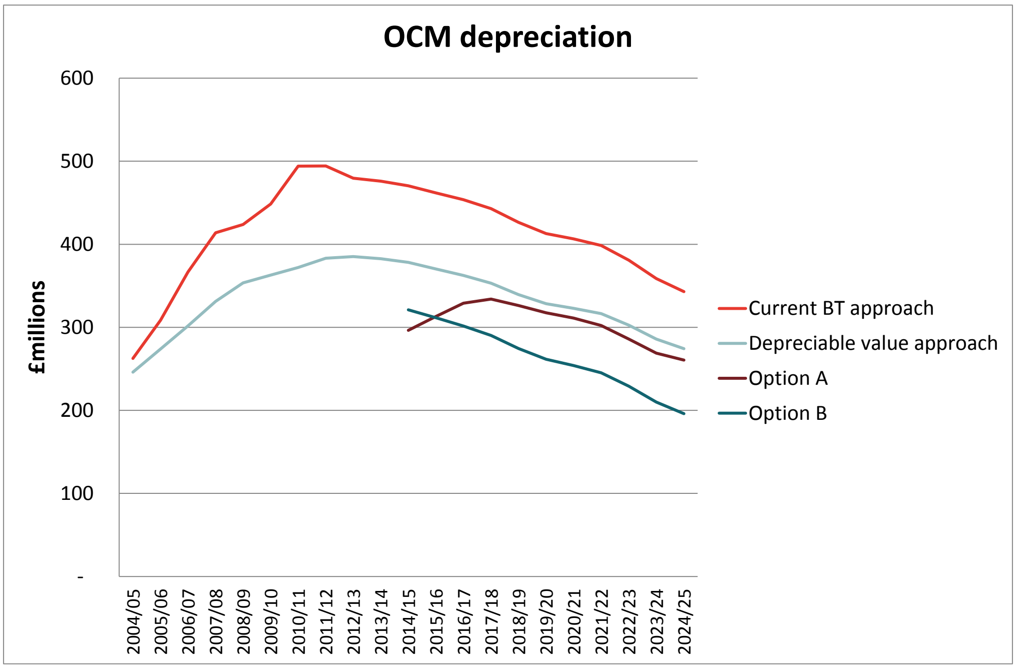
3.2.3 Results

In the following example we have calculated the liability based on assets purchased since April 1991, i.e. excluding the residual value of assets purchased before that date. The liability is amortised over 20 years.

Depreciation and amortisation charge

The net depreciation charge would be consistently lower than that for the depreciable value approach during the period over which the liability was amortised.

Figure 11. Depreciation and Amortisation under Option B

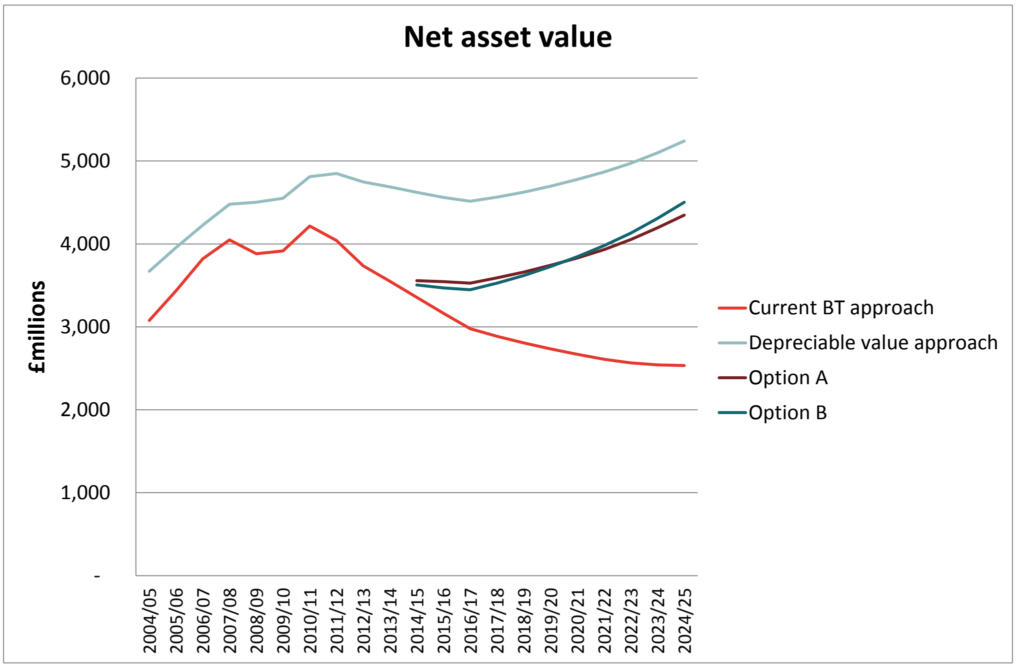


Source: Frontier

Net asset value

This approach would effectively set a glide path from the current carry value of the assets to the value of the assets under the depreciable value approach. At the end of the amortisation period the two would converge.

Figure 12. Net asset value under Option B

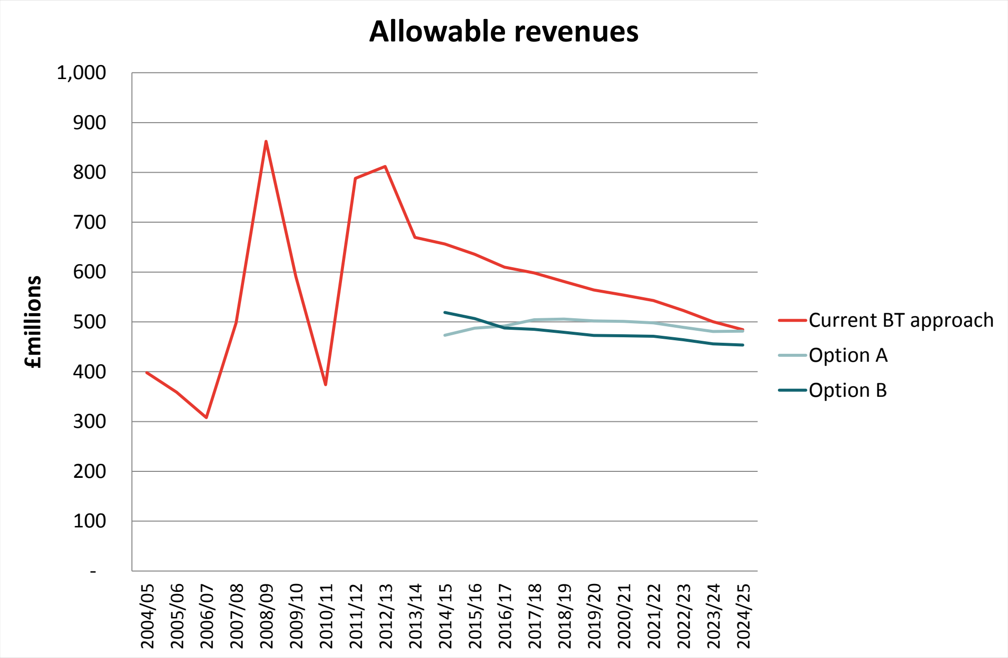


Source: Frontier

Allowable revenues

The allowable revenues under this approach would be below those of the current approach, but as in Option A, the two series would converge over time due to the higher cost of capital offsetting the reduced depreciation charges.

Figure 13. Allowable revenues under Option B



Source: Frontier

3.2.4 Assessment

Option B has a number of theoretical advantages:

- if copper cable is scrapped after the liability has been fully amortised, there would be no resulting windfall gain to BT's shareholders; and
- once the size of the liability has been established, the methodology is straightforward to implement and is transparent.

However it requires determination of the appropriate time period for amortisation of the liability the basis of which would be uncertain.

3.3 Conclusion

Option A has a number of practical advantages and unlike Option B does not require Ofcom to determine a parameter (the amortisation period) which would need to be based on a judgement of the long term development of the local access network. For this reason we consider Option A to be a more appropriate methodology in practice.

Under Option A, the carrying value of some existing assets would remain below their residual value and as such BT could generate profits on disposals in the event the corresponding cables were recovered and scrapped. However such profits could be returned to customers in some form during the period in which the existing copper network was turned off[22].

[22] For example to offset any accelerated depreciation of newer copper cable assets assets in the period leading up to "switch over".

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