

Note on the nature and extent of detriment arising from the AEC

Introduction

1. This note outlines the analysis we have conducted with a view to determining the likely nature and extent of detriment arising from the AEC that was identified in our provisional findings in relation to the leasing of rolling stock.

2. In our provisional findings (paragraph 8.10), we concluded that detrimental effects would arise for those leases where either there are no (or very few) alternative fleets available, or where the competitive pressure from alternative used rolling stock and/or new rolling stock is limited. We identified two aspects to the detrimental effects:
 - (a) TOCs face a lack of rolling stock alternatives and so cannot choose the fleets that best suit their needs; and
 - (b) ROSCOs have the opportunity to increase rentals above competitive levels.¹ We consider each of these two aspects in paragraphs 10 to 13.

The nature of detriment

3. To consider detriment, we need first to take a view on the impact of the AEC. In order to do this, we have compared the existing market, in which the AEC applies, with a hypothetical comparator market where the AEC does not exist. We refer to this comparator as ‘a well-functioning market’, ie one where the process of competition is effective.²

¹We include in detriment both increased costs to TOCs as customers, and higher subsidy costs to franchising authorities.

²The nature of the well-functioning market comparator could differ according to the nature of the market under consideration. Identifying a well-functioning market does not necessarily mean that it could exist in practice, for example one or more of the features that cause the AEC may be inherent in the nature of the market and thus impossible to remedy. The CC’s statutory duty is to decide whether to remedy, mitigate or prevent the AEC or its consequences; it is not necessary to address each feature directly.

4. The DfT has argued to us that there are in most cases separate markets for new and used rolling stock. It said that new rolling stock would not generally be a substitute for used rolling stock because of its higher cost. However, we see no reason to expect that in a well-functioning market, separate markets would develop and be sustained for rolling stock according to its age. Therefore we do not think that this view provides an appropriate comparator in order to assess the consequences of the AEC.

5. We consider that in the long term, in a well-functioning market, there would be a choice of fleets available to TOCs and they would have the ability to switch between fleets. In other words there would be a reasonable degree of liquidity, and TOCs would simply switch as necessary to fleets that represented better value for money. This in turn would generate competitive tension and stimulate rivalry between ROSCOs. In this well-functioning market, new and existing rolling stock would be substitutes, and rentals for each of them would be formed on a common basis, when adjusted for differences in the utility (revenue-earning capability, operating and maintenance costs etc) of the rolling stock. We would expect that the long-term competitive rental for rolling stock would be the rental level that would leave TOCs indifferent between taking new rolling stock at a higher rental or existing rolling stock at a lower rental (given that new rolling stock may have lower operating costs and greater potential to increase passenger revenue through encouraging more passenger journeys). If rentals for used rolling stock were held below this level in the long term then there would be no incentive for the ROSCOs to introduce new rolling stock to increase capacity or to replace old rolling stock as it was retired, because TOCs would only be willing to lease the relatively cheaper existing rolling stock. If rentals rose above this level, TOCs would have an incentive to switch to new rolling stock instead.

6. We would expect that rentals would be set in response to changes in demand and supply on a lease-by-lease basis, and so in the short term would rise or fall accordingly. Thus, for example, if there was short-term excess demand for a particular type of rolling stock, we might see short-term rentals increasing; similarly if demand fell for a particular type of rolling stock, surpluses would place downward pressure on rentals. Eventually, the introduction of new rolling stock or the retirement of unwanted rolling stock will bring the market back to a long-run equilibrium.
7. The level of rentals in a hypothetical well-functioning market arising from the new rolling stock constraint would vary on a lease-by-lease basis according to the additional utility of new rolling stock, reflecting the circumstances of the particular franchise and the value a particular TOC places on the benefits of new rolling stock. The constraint from potential substitution by new rolling stock would not necessarily work directly on all fleets. Sometimes it would work indirectly through a competitive constraint from alternative existing rolling stock. The process by which this indirect constraint may operate is explained in Annex 1.
8. In summary, we have concluded that in analysing detriment we should compare what we can observe has happened in the market with what might be expected to happen if TOCs were able to switch between alternative existing fleets or to new fleets of rolling stock better suited to their requirements. The competitive market rental would be one where TOCs were indifferent to leasing that fleet or the closest substitute fleet, be it new rolling stock or an existing rival fleet. Ultimately rentals would be constrained, directly or indirectly, by rentals for new rolling stock (taking account of differences in utility).
9. We consider that detriment arises where there are failures in the competitive process, such that rentals can persistently increase above the level which might be

established in such a well-functioning market. Therefore, in considering the extent of detriment, we need to distinguish between rental changes which reflect normal market adjustments to changes in supply and demand, and changes which result from failures of competition, whereby rentals could increase above competitive levels.

Aspects of detriment

Lack of choice

10. A lack of choice arising from the AEC means that TOCs have a restricted range of options. The potential set of choices in a well-functioning market would be wider than actually occurs at present, because limitations on the TOCs' ability to exercise choice prevent them from opting for other (potentially preferable) alternative fleets of rolling stock.

11. There is no clear way of defining the number of relevant alternatives a TOC would face in a well-functioning market. However, our analysis of substitutability in the provisional findings (Appendix 4.1) identifies the number of instances where there were no alternatives, or only one alternative, expressed as a percentage of the number of instances we considered. This analysis on its own does not tell us in which of those cases optimal outcomes were achieved despite the lack of choice (because we cannot say with any certainty whether a TOC would have chosen something different).

Higher rentals

12. This aspect of detriment arises from rentals being higher than they would be in a well-functioning market, leading to a higher cost to customers (including taxpayers in this context). In this case our AEC implies that rentals for existing rolling stock could

rise above the level we would expect to see in a well-functioning market because of a lack of opportunity or incentive for TOCs to exercise choice.

13. There is a difficulty in comparing observed market rental levels with the rental levels which would reflect TOCs' views of the utility of new rolling stock. The utility difference between fleets is extremely complex to identify and measure. In addition, the utility of a particular fleet varies depending on the context in which rolling stock is used by the TOC. For example, the scope for growing passenger demand depends on the circumstances of particular services. Additionally, this constraint may work indirectly through the potential for substitution from alternative existing rolling stock. We do not have reliable information that will allow us to make these comparisons.

Methods to infer the scale of detriment

14. In the absence of the necessary information to conduct a comparison of actual rentals and rentals in a notional well-functioning market on a fleet-by-fleet basis, we have considered a number of alternative methods to infer the scale of the price detriment. These are detailed below. However, we find that none of these measures closely corresponds to our concept of detriment.

Quantitative estimates of the impact of competition

15. In our provisional findings we examined econometrically how rentals were affected by the number of ROSCOs considered by franchise bidders. Based on these results, we can estimate how much lower rentals would have been if, in all cases, at the most recent lease renewal, all three ROSCOs were potential competitors. This analysis does not establish whether the lower rentals would be fully or only partly at a competitive level. In addition, this approach may reflect temporary surpluses of particular classes of rolling stock, as well as market power as a result of a limited

number of competing ROSCOs at that point in time. As a result, this analysis may not fully reflect a long-run sustainable market outcome.

16. This approach is detailed at Annex 2.

Profitability analysis

17. Detriment can sometimes be inferred from profitability, on the assumption that prices in excess of competitive levels feed through directly into profits in excess of the appropriate cost of capital. However, profitability results need to reflect a long-run outcome across the industry. We are not convinced that the costs currently faced by the ROSCOs, upon which the information used in the profitability calculations is based, necessarily reflect the functioning of long-term competition. For example, if particular firms have high profitability because the initial historic asset value was reduced to reflect perceived risks, the profitability results do not necessarily demonstrate a failure of competition or provide a meaningful measure of an associated detriment. Implicitly, these profitability calculations compare profitability to a market where asset values do not adjust in response to changes in supply and demand; rather, they take as a comparator a well-functioning market where asset values are fixed. For the reasons set out in paragraph 5 we do not consider that this reflects a sustainable comparator market.
18. In the rolling stock market, there are also very significant practical difficulties in conducting a profitability analysis, as a result of:
 - (a) the long-term nature of the assets;
 - (b) the absence of any second-hand market to provide a benchmark for valuing existing rolling stock; and
 - (c) the fact that for each MOLA fleet there has only been one competitive determination of rentals which has spanned only a small proportion of the asset's life,

and where it is unclear to what extent rentals would have adjusted to a long-term competitive level.

19. Given these issues, we do not consider that an analysis of profitability can be considered a reliable measure of the extent to which rentals are higher than they should be.
20. Nevertheless we attempted two different approaches to infer detriment from the profitability analyses. These are set out at Annex 3, together with an explanation as to why these do not reliably indicate detriment. We also discuss a third method based on comparing rentals for MOLA rolling stock with rentals for new rolling stock, although there is a lack of data available to support this analysis.
21. The DfT in its response to our provisional findings also undertook an analysis of detriment, based on the profitability results published in our provisional findings. This is discussed at Annex 4.

Conclusions on the quantification of detriment

22. The discussions above indicate that all these methods of considering the scale of detriment relating to rental levels have substantial conceptual and/or practical flaws. We stress that the degree of uncertainty around the figures shown in Annex 2 and Annex 3, under all the approaches, is very high, and that conceptually there are factors which mean that the results could either be underestimates or overestimates of the true detriment.
23. We are aware that assessments of detriment based on analysis of past pricing and conduct may not be a good indicator of levels of detriment in the future, especially given changing market conditions. It is also our judgement from all the evidence

available that ROSCOs do not appear to have taken full advantage of the opportunities to increase rentals at lease renewal which may be suggested by the market power they derive from the features we have identified in this market (see provisional findings, paragraph 7.10). This leaves scope for detriment possibly to increase in the future in the absence of appropriate remedies or safeguards.

24. The absence of choice, while not itself representing an additional financial cost, represents an additional aspect of detriment.

Indirect constraints on rentals in the well-functioning market arising from existing rolling stock

1. In a well-functioning market, TOCs would have the ability to switch both to new rolling stock and to alternative existing fleets. We have explained that rentals should be constrained by a utility-adjusted new-build equivalent rental. However, there is also potential for competition between existing fleets. As well as the constraint on rentals arising from the threat of new rolling stock substituting for a particular fleet, an indirect—and possibly tighter—constraint exists where an alternative existing fleet could become available as a result of being displaced by new rolling stock.

2. This possibility arises if the utility advantages offered by new rolling stock are greater for some alternative existing fleets, given the nature of the services where they are used. For example, the substitute fleet might be in use on a route where new rolling stock offered a greater potential to increase passenger journeys. Therefore, there could be a closer constraint from new rolling stock on this alternative fleet, and a one-step cascade could occur whereby new build replaced the alternative existing fleet, which in turn could replace the incumbent existing fleet if rentals rose above a competitive level. Effectively, indirect constraints create a chain of substitution whereby some fleets may be replaced by new rolling stock, which in turn displaces the fleets used on other franchises.

3. This possibility of an indirect constraint can be illustrated by an example. If new rolling stock were available at £8,000 per vehicle per month (pvpm), and it had a relative utility advantage to TOC A over its existing incumbent rolling stock of £2,000 pvpm, the maximum rental the ROSCO owning such existing stock (ROSCO 1) could demand from TOC A for its incumbent fleet would be £6,000 pvpm. However, if TOC B had a similar existing fleet, but the relative utility to it of the same new rolling

stock was greater, say £3,000 pvpm (because, for example, of greater potential for passenger revenue growth), then ROSCO 2 supplying TOC B could only demand a rental of up to £5,000 pvpm for the existing fleet. TOC A would be willing to pay a rental of between £5,000 and £6,000 to lease TOC B's existing fleet, so that ROSCO 2 could realize a higher rental and TOC B would turn to new rolling stock. ROSCO 1 currently supplying the existing fleet to TOC A would then be displaced. Effectively, the rental it can demand of TOC A is limited not by the utility-adjusted new-build equivalent rental for TOC A, but for TOC B. The closeness of these indirect constraints would depend on how close alternative fleets are as substitutes.

Quantitative estimates of the impact of competition

1. This annex uses the econometric analysis of competition (see Appendix 6.2 of our provisional findings) to indicate a possible measure of higher rentals paid as a result of a lack of choices for TOCs in the provision of rolling stock, and so a possible lack of competition.
2. Our econometric analysis examined how lease rentals changed according to the number of ROSCOs which owned competing fleets that were considered by franchise bidders. We found that an additional competing ROSCO has a 6 per cent effect on reducing lease rentals. Taking into account the confidence interval (so that we can be 90 per cent certain of what the effect is), we found a range of 0.5 to 11.7 per cent reduction in lease rentals for each additional ROSCO. The coefficient of 6 per cent is the most likely price effect for the true relationship between the number of ROSCOs considered and price change, but the confidence interval around the estimated coefficient takes into account the error margins that are built into the estimation process.
3. We applied these coefficients to estimate how far prices would have fallen had there been more competition on those leases on which we found a lack of competition (alternative ROSCOs).
4. The calculation is based on an assumption that three ROSCOs is the competitive benchmark and it applies a 6 per cent price reduction to those leases where there was one alternative ROSCO and double this (to cover two alternative ROSCOs) 12 per cent price reduction to those leases where there were no alternative ROSCOs. This produces an estimate of £31 million a year (with a range of £2–£60 million a year).

5. The assessment has a number of important limitations:
- (a) It assumes that three ROSCOs are required to create a fully competitive outcome, and that there is no further competitive benefit to be realized from competition from further ROSCOs. If more ROSCOs are required for a competitive outcome, our calculation would underestimate the size of the detriment.
 - (b) Our econometric analysis only examines changes in price not price levels. This analysis assumes that a 'competitive' price change is one that leads to a 'competitive' price level. If prices had not yet reached the competitive level due to stickiness in prices, such that it takes several negotiations before the truly competitive price level is reached, then we would be underestimating the level of detriment.
 - (c) There is an implicit assumption that there are up to two more alternative ROSCOs, not just more new rolling stock alternatives.
 - (d) The analysis is based on the reliability of the econometric estimates, which is driven by the reliability of the capex adjustments and the assessment of the number of alternatives considered.
 - (e) The calculations exclude short-term lease premiums. If there were some element of market power that led to short-term premiums, then we would be underestimating the level of detriment to some extent.
 - (f) The calculations do not include any adverse effects on post-MOLA rolling stock which has been re-leased or is due to be re-leased. This might also increase the size of detriment.
 - (g) The analysis attributes rental reductions to competition even where these reductions are substantial falls in response to a temporary surplus of rolling stock. Because rentals that result may then not be sustainable in the long term, the coefficients may overestimate the effects of competition on price relative to a long-run well-functioning market. Consequently this suggests that the estimates of detriment are likely to overstate the true detriment.

Profitability analysis and measures of detriment

Introduction

1. As outlined in the main body of this paper, we consider that a profitability analysis based on historic MOLA asset values is unlikely to provide a meaningful estimate of detriment in this case. Nonetheless, we performed two analyses to try and shed some light on possible detriment. We also undertook an alternative method of estimating detriment using changes in the rental levels of the first lease of new rolling stock.
2. First, we set out the limitations in estimating detriment using profitability, both for ROSCOs and more generally. We then attempt to estimate detriment using three methods—margins, truncated IRRs and comparison with changes in capital lease rentals for new rolling stock. Finally, in each section we interpret the results and set out the biases and limitations of our analysis.
3. The first two methods are unsuitable for our purposes because they are based on historic asset prices, which does not fit with our view of a well-functioning market (the well-functioning market does not envisage any competitive pressures on rentals depending on historic asset prices). The third method is based on current prices, but contains a large number of sensitive assumptions and estimates, giving only limited validity to the result.

Issues and limitations with using profitability analysis to estimate detriment

4. Conceptually, the idea behind this approach is that in so far as ROSCOs are able to set higher prices than would apply in a well-functioning market, this would be reflected in higher profits (assuming the lack of competition was not reflected in reduced efficiency). As competition through, for example, new entry would drive

profits down to normal levels, profits in excess of the WACC would indicate a lack of competition and the scale of the profits would indicate the size of the detriment.

5. This raises two conceptual concerns. First, the market for rolling stock is very young, with most rolling stock having experienced just one competitive re-leasing event, and so the extent to which the market can be expected to have adjusted to a level where the results give a clear reflection of the extent of competition is uncertain. Second, the model assumes that competition in a well-functioning market arises from similar rolling stock, for example through competitive entry in similar used rolling stock. If instead the well-functioning market is believed to be competitively constrained by a utility-adjusted new-build equivalent, then there may be potential for prices to adjust for existing stock in the presence of scarcity without this necessarily representing a failure of competition.

6. As we mentioned in our profitability analysis, there are also a number of issues which affect the accuracy of our results. These include assumptions inherent in the data (such as a 30-year economic life for rolling stock), the short period for which the market has been operating (meaning we cannot assess profitability over an economic cycle, or over the lifetime of the assets), the lack of comparator market data, different data sets between the ROSCOs, and the lack of reliable data on asset values. Each of these has the potential to over- or understate detriment.

7. In particular, our inability to derive accurate asset values for MOLA stock severely limits the confidence we can have in the accuracy of our profitability analysis, or any detriment calculations using this analysis. This is because any results are extremely sensitive to asset values used.

Approach to estimating detriment using profitability

8. The following sections set out two methods of estimating detriment based on our profitability analysis and financial information received from the parties.

Estimating detriment using margins

9. We found that there was active competition in the procurement and initial lease of post-MOLA stock, leading to an initial rental (and thus margin) which was competitively determined. We therefore use post-MOLA margins as a comparator when estimating MOLA detriment.
10. We converted the difference between MOLA and post-MOLA margins into IRRs, set up a discounted cash flow model over the remaining life of the MOLA stock and compared the annual rental required to produce these IRRs with the annual rental required to produce an IRR at WACC. The difference between these annual rentals would represent an estimate of detriment.¹
11. Although we assumed an effective tax rate of 30 per cent for both MOLA and post-MOLA stock in our provisional findings, subsequent work showed the effective tax rate of post-MOLA stock to be approximately zero² (owing to the significant capital allowances) and of MOLA stock to range between 0 and 60 per cent depending on the age of the stock at privatization. This meant that, for younger MOLA stock, the difference between post-MOLA and MOLA margins narrowed, and for the older MOLA stock (of which there were fewer vehicles) the difference widened.
12. The results showed a negative detriment for ROSCO A (since under the updated tax work MOLA margins were lower than for post-MOLA rolling stock). The detriment for

¹For Angel, we used an IRR calculated by OXERA and compared this with our WACC.

²The effective tax rate over the life of post-MOLA stock depends on assumptions over rental levels, margin and expected life. We also assumed that tax losses could be utilized immediately against group profits.

ROSCO B was positive and in the low tens of millions of pounds (£). The results for ROSCO C produced a detriment between that of the other two ROSCOs.

Issues and limitations with margin analysis

13. As noted above, the use of margin analysis based on historic asset values provides no convincing evidence of the scale of detriment if the correct competitive rental is taken to be determined by reference to a utility-adjusted new-build equivalent rental.
14. Furthermore, the fact that the detriment was found to be concentrated in one company, and that another had negative average detriment, was unexpected and suspicious in that if higher profits resulted from a lack of competition in the market, this effect would be expected to apply to all the ROSCOs.

Estimating detriment using truncated IRRs

15. We also attempted to estimate detriment by calculating a truncated IRR for each ROSCO's MOLA fleets for the period 2002 to 2007, based on accounting data supplied to us by the ROSCOs. This analysis models the returns each ROSCO would have made if it had purchased its MOLA fleets at net book value (NBV) on 31 December 2002 and sold them at NBV on 31 December 2007.
16. As a cross-check, we ran a similar analysis for post-MOLA stock. We then reduced the MOLA EBITDA to the amount where the IRR would be equal to the post-MOLA returns.

17. We took tax into account in our model. For MOLA stock we assumed that the average tax rate was 30 per cent.³ For post-MOLA stock we assumed that a 25 per cent capital allowance was available on all new stock.
18. The results of our analysis showed a negative detriment for ROSCO A, a small positive detriment for ROSCO B and a larger positive detriment for ROSCO C.

Issues and limitations with truncated IRRs

19. As noted above, the use of historic asset values (in this case book values) in an IRR analysis provides no convincing evidence of detriment if the true competitive rental is taken to be determined with respect to a utility-adjusted new-build equivalent rental.
20. The fact that the detriment was found to be concentrated in one company was suspicious. Because we would expect a detriment to arise in respect of all the ROSCOs, it indicates a risk that the results are driven in part by company-specific data issues such as depreciation policy.

Estimating detriment using rental levels for new rolling stock

21. A further method of estimating detriment can be undertaken by examining changes in rentals since privatization for new rolling stock at first lease. If initial MOLA rentals were set according to indifference pricing (and we accept that this indifference pricing still holds), then changes in MOLA rentals should track changes in the initial rentals of new rolling stock. We would also expect MOLA stock to fall relative to the initial rental of new rolling stock because of the increasing utility differential as the MOLA fleets age.

³As noted above, the effective tax rate of MOLA fleets is likely to vary between 0 and 60 per cent depending on the age of individual fleets. Given the age profile of the entire MOLA stock, an average tax rate of 30 per cent appears reasonable.

22. In the pricing approaches appendix in our provisional findings (Appendix 4.3) we found that the average capital rental for post-MOLA stock on first lease had fallen by approximately 20 per cent since privatization (although this is derived from visual inspection of the prices of a very small number of dissimilar rolling stock orders). This reduction arose from two opposing effects—an increase in the purchase price of new trains and a decrease in the cost of funds.
23. If MOLA rentals move in line with first-lease post-MOLA rentals, then we would expect to observe a similar fall in these rentals. In fact, we saw an average increase in the population of 121 leases of 0.02 per cent.⁴ However, this includes rentalized capital expenditure. If this is stripped out then we observed a 2.18 per cent decrease.
24. We also need to take the difference in utility into account. HSBC's work on utility suggested that on average a 30-year old train had approximately 60 per cent of the utility of a new one. If we assume a straight line decline in utility differential, we should see an average fall in rentals attributable to this utility differential of 1.33 per cent for each year that the MOLA fleet is older than equivalent new rolling stock.
25. Using the estimates above, since privatization we would expect to see a difference in relative rentals of 35 per cent (20 per cent plus 1.33 times 11 years). If the actual change is a 2.18 per cent decrease, then we can estimate the midpoint of our range of detriment to be 33 per cent of the total MOLA capital rentals for 2007 (£369 million). The midpoint of our range of pre-tax 2007 detriment is therefore estimated to be £123 million. However, 33 per cent is the fall we would expect to see if all of the leases had been renewed in 2007. Since the MOLA leases were in fact renegotiated throughout the post-privatization period, a better estimate would be considerably lower than £123 million, depending on the timing of lease renegotiations and the

⁴Source: Table 5, paragraph 52 of Appendix 4.3.

changes in new-build prices over time. This resulting range of detriment is therefore very wide, and any attempt to narrow this range would be extremely sensitive to the assumptions on rental trends for new rolling stock and relative utility. This figure also excludes the cost of impairments, which would reduce detriment significantly.

26. There are a number of reasons why this figure is no more than the vaguest of estimates. As outlined in the appendices to our provisional findings, we had considerable difficulty getting rental data and excluding capital expenditure. The fall in new rentals is dependent on the visual inspection of graphs of only a few leases⁵ and where there is no clear trend. The results assume that the initial indifference price was accurate and reflected current tax rates—we cannot say that this assumption holds in either case, and we only have a very general estimate of relative utility and how it declines over time.

⁵Figures 4 and 5 of Appendix 4.3.

The DfT's detriment calculations

1. In its response to our provisional findings, the DfT provided an estimate of detriment 'adopting the principal assumptions used by the CC'. This estimate ranges between £30 million and £100 million 'in the first year following MOLA lease renewals'.
2. The DfT reworked the profitability analysis it originally submitted to the ORR, but this time using the CC's figures for asset values and WACC. This produces a range of £26–£98 million. Its methodology was to take the chosen opening asset value (it used purchase price¹ and also our reduced asset value where a 15 per cent sensitivity adjustment has been applied) and to depreciate it, using annuity depreciation, to a 2005 figure. It then produced an IRR using this depreciated figure and the current lease rentals, assuming that these rentals continued to the end of the vehicles' useful economic lives.
3. We note that this analysis does not take into account capital expenditure on MOLA fleets which have led to increased rentals, nor the effect of impairments, nor un-rentalized capital expenditure.² Annuity depreciation, although probably the best assumption and certainly better than straight line, may not reflect the actual decline in rolling stock values.
4. We also noted a number of differences in the asset values used.³ The DfT has used a higher purchase value for Angel but a lower purchase price for Stagecoach than we have identified.

¹This is the price paid to acquire the ROSCOs when they were first resold (to Stagecoach, HSBC and RBS) after privatization.

²This is acknowledged by the DfT, although it considers that any assessment of the claimed impact of capital expenditure on asset values and rates of return needs to be undertaken extremely carefully, so as to ensure that asset values are not inflated and that the effect of such capital expenditure on asset life is taken into account.

³These are set out in Table 1 of Annex 1 of the DfT's submission (p25).

5. The DfT then calculated IRRs using these asset values. This produced IRRs of 8.0 to 9.6 per cent using purchase prices and 11.1 to 22.9 per cent using the lower sensitivity asset values. This was then compared with the CC's range for WACC in the period 2002 to 2007 (6.5 to 7.7 per cent). By re-running the IRR analysis, it then determined a 'competitive' rental which would produce an IRR of 6.5 or 7.7 per cent. This 'competitive' rental range is then compared with the actual MOLA rentals to arrive at a detriment range.

6. The same issues on methodology and calculation apply to the DfT's work as apply to our own analysis as identified above. In particular, the DfT's analysis is based on historic asset values. Furthermore, the omission of capital expenditure and impairments overstates the range as a whole.