

Introduction



In April 2003, the Government completed the move to the new resource based financial management system in central government. The new system, by bringing together central government planning, budgeting, Estimates and reporting on to a full resource basis, places the UK government amongst the world leaders in financial management reform in the public sector.

This new, updated edition of the Orange Guide is being published in the run up to the 2004 Spending Review (SR2004), to help widen understanding of how the new accruals based system works and what it means in practice for budgets, Estimates and accounts. It contains a number of practically based case studies, tailored to individual departments, using examples based on departments' main areas of business. The case studies aim to show how resource budgeting has changed the way public spending is recorded under the new financial management system, and how this will affect the conduct of SR2004.

The aim is for the Guide to be of value not only to those in spending departments and the Treasury directly involved in the SR2004 process, but also to Parliament and others interested in the new resource based approach.

Like the first edition published in January 2002 in the run up to SR2002, this Guide contains a selection of around 20 case studies, together with suggested solutions. Some of the case studies are short and relatively straightforward. Others are more complex. **All are fictitious.** The booklet is structured as follows:

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Why are the case studies relevant?



The case studies in this booklet are not intended solely for technical accounting experts in government. The concepts and techniques underlying the new resource based approach need to be understood by everyone involved in planning, budgeting, controlling and reporting on public spending, both in the Treasury and in other government departments.

Resource budgeting framework

The 2002 Spending Review, which set public spending plans for 2003-04 to 2005-06, saw the full introduction of resource budgeting. The 2004 Spending Review builds on the work carried out in SR2002, and will set spending plans for 2005-06 to 2007-08. The resource budgeting framework remains essentially unchanged, and is explained more fully on pages 6 and 7.

Benefits

The implementation of this long planned reform has had profound implications for managers of public expenditure at every level in all areas of government. Departments' main budgets now reflect the full economic cost of providing services.

The move to resource budgeting has also resulted in a step change in asset management, better incentives and information for managers at all levels, and increased transparency and accountability.

No department is unaffected by these important changes. In order to realise the benefits, it is vital that departments fully understand the practical implications of resource budgeting, during both the spending review itself and the period of its operation.

The aim of this booklet is to promote greater understanding of the new system by demonstrating, through practically focussed, hypothetical case studies covering a wide range of topics, how resource budgeting has changed the way public expenditure is managed and controlled. The booklet can be used as a training resource, particularly for those unfamiliar with resource budgeting or public finance. If it is intended to use the booklet for internal training purposes, the case studies can be adapted by tailoring them to the circumstances of individual departments and removing the solutions from the answer sections.

Wider audience

The case studies are also aimed at those outside government with an interest in the new resource based approach, both in Parliament and amongst other outside commentators.

What the case studies mean

The 'solution' to each case study begins with a brief summary of the general principle that is being applied in each case. It then sets out in detail the implications for budgets, Estimates and accounts. By way of illustration, the following are the sort of implications that the case studies illustrated in this booklet can have.

Implications of the case studies

- Case study 1.1** shows the impact on budgets, Estimates and accounts of the full cost of holding assets through depreciation and cost of capital charges.
- Case study 1.3** illustrates the importance of the concept of capitalisation of expenditure.
- Case study 1.4** illustrates how diminutions in asset value and asset usefulness affect budgets, Estimates and accounts.



Why are the case studies relevant?

- Case study 1.6** shows that decision making can and should be influenced by the most effective way of maintaining assets.
- Case study 1.7** shows the treatment of an asset sold at less than its net book value and the effect on depreciation and cost of capital charge.
- Case study 1.9** explores the consequences of the destruction of fixed assets and irreplaceable heritage assets.
- Case study 2.1** explores the treatment of managing stock.
- Case study 3.1** shows how the accounting concept of provisions affects budgets, Estimates and accounts.
- Case study 4.1** covers the difference between a provision and a contingent liability. The recording of a contingent liability does not affect the budget, but might be considered in spending reviews as part of the overall pressures faced by a department.
- Case study 5.1** demonstrates that cash does not automatically convey spending power.
- Case study 6.1** shows the treatment of NDPBs in departments' budgets, Estimates and accounts. NDPBs score in budgets on the basis of full resource consumption and new capital investment, whereas in Estimates and accounts only the actual payments made by departments are recorded.
- Case study 7.1** shows how the budgeting regime for trading funds and most public corporations is based on the transactions in the accounts.
- Case study 8.1** illustrates how to reflect increases and decreases in investments in budgets, Estimates and accounts, and how changes affect the cost of capital charge.
- Case study 9.1** highlights the treatment in budgets, Estimates and accounts of loans, repayments and interest on loans. Loans have both capital budgetary effects (net lending) and resource consequences (the cost of capital charge and bad debts).
- Case studies 10.1 and 10.2** explain the consequences of off balance sheet and on balance sheet PFI deals.

Real world effects

Each of the examples in this booklet has real implications for departments' budgets, Estimates and accounts under the new resource based approach.

The effects need to be fully understood by everyone involved in planning, controlling and accounting for public spending.

Key concepts



The key accounting concepts used in the case studies are highlighted below. They are explained in more detail at Annex A. The accounting concepts arise within the broad context of:

- UK GAAP (Generally Accepted Accounting Practice in the UK) – a combination of accounting and disclosure requirements, including those of the Accounting Standards Board (ASB), supplemented by generally accepted professional judgement.
- The RAM (the Treasury's Resource Accounting Manual) – which sets out the requirements for government entities on the application of UK GAAP. Differences between UK GAAP and the RAM are kept to a minimum.
- The FRAB (the Financial Reporting Advisory Board) – an independent group of professionals responsible for reviewing and updating the RAM.

Key accounting concepts

The key accounting concepts relevant to the case studies are:

Operating cost statement

Accruals
Depreciation
Cost of capital charge

Balance sheet

Assets
Liabilities
Stock
Prepayments
Provisions

Assets

Capitalisation
Revaluations and impairments
Gains and losses on disposal

Other

Contingent liabilities
Operating leases and finance leases
PFI contracts
Joint ventures

If some of these concepts are unfamiliar, you may find it helpful to refer to the explanations in Annex A in tackling the case studies.



Budgetary control framework

The system of public expenditure planning and control has undergone considerable change over recent years. The main features of the new system are described below.

Fiscal rules

To ensure that public spending is sustainable and affordable, spending plans are set in accordance with the requirements of the *Code for Fiscal Stability* and must meet the strict fiscal rules set by the Government.

The **golden rule** states that over the course of the economic cycle, the Government can borrow only to invest, whilst the **sustainable investment rule** requires that public debt should be held at a stable and prudent level.

3-year budgeting

So that departments can plan with certainty over a reasonable time period, spending plans are set on a three year basis. Firm departmental budgets are allocated for three years. These are called Departmental Expenditure Limits (DELs).

Other expenditure which cannot be managed on a three year basis is treated as Annually Managed Expenditure (AME). Some examples of AME expenditure include social security, debt interest and Common Agricultural Policy payments.

End year flexibility

To avoid wasteful end year surges in spending, departments can carry over in full underspends from previous years.

Separate capital budgets

There is a separate Departmental Expenditure Limit for capital, which protects long term investment plans from current pressures. Departments prepare investment strategies, setting out how they will use this allocation to improve the stock of public capital.

Focus on outcomes

Departments, through their Public Service Agreements (PSAs), agree to deliver specified outcomes and outputs in return for their resources.

Resource budgeting

2003-04 saw the full implementation of resource budgeting. This means that departments' main budget for current expenditure, the resource DEL, now includes charges for:

- depreciation – the cost of using assets;
- a cost of capital charge – the cost of holding assets; and
- movements in provisions – committed future expenditure, such as compensation payments.

The move to full resource budgeting in SR2002 meant there were a number of significant changes to the budgeting framework. In the light of this, the decision was taken not to amend the framework for SR2004.



Budgetary control framework

Budgetary control framework for SR2004

In summary, the budgetary control framework for SR2004 is as follows:

	RESOURCE	CAPITAL
DEL	<ul style="list-style-type: none">Main current programme costs of departments and NDPBsAdministration costsDepreciation, Impairments and ProvisionsCost of capital chargeCapital grants, excluding those to local authorities and those financed from the Capital Modernisation Fund	<ul style="list-style-type: none">New capital spending by departmentsNew capital spending by NDPBsCapital grants to local authorities and those financed from the Capital Modernisation FundNet of asset salesNet lending
AME	<ul style="list-style-type: none">Social securityDebt InterestEU paymentsPublic pensionsLotteryOther AME	<ul style="list-style-type: none">Capital Spending in AME, eg LotterySelf financed capital spending by public corporations

Links

An explanation of the links between budgets, Estimates and accounts is at Annex B.



Quick quiz

Before launching into the detailed case studies, here is a quick quiz to test your basic knowledge of a key accruals accounting concept – the difference between what scores as capital and what scores as resource (expense) under RAB. The answers are on page 74.

Quick quiz

Capital or resource?

Which of the following items are expenses (resource in nature) and which items are assets (capital in nature)?

1. Architect's fees for the design of a new departmental HQ.
2. Grant by a department to a museum that is a non-departmental public body (NDPB) for an extension to the museum. What if the grant was to a local authority museum?
3. Consultant's fees for research into new departmental policies.
4. A new boardroom table for the Permanent Secretary of a department.
5. Major enhancement to a department's accounting system to expand it beyond its original life expectancy.
6. A commercial company has launched a legal action against the department for breach of copyright. Treasury solicitors have estimated that damages could range from nil to £10 million.
7. A toxic waste incineration plant is built next to some buildings owned by the department and as a result there is a reduction in the level of service the department can offer.
8. A department sold some land for £5 million to a charity to be used as a sports ground. The charity paid £1 million but has now been declared insolvent.
9. Purchase of trees for the royal parks. What if flowers were purchased?
10. A department leases some equipment.



Case studies (1): assets

This section considers a variety of fictitious fixed asset based case studies. Areas covered include the accounting implications of holding assets, capitalisation policy, impairment, renovation of assets, increased asset life, loss on disposal, the purchase, sale and destruction of assets, and accounting for infrastructure assets.

Case study 1.1

1.1: Accounting implications of holding assets

At 1 April 2003, the building housing the Department for Culture, Media and Sport (DCMS) is valued at £18 million. The building is assessed to have a useful life of 50 years from 1 April 2003. The land is valued at £120 million.

Questions:

What would be reflected in DCMS' Estimate and resource accounts for 2003-04, assuming that land and buildings values remain static over the year?

What is the budgetary cost to the DCMS of these assets during 2003-04?

Solution

This case study shows the impact on budgets, Estimates and accounts of the full cost of holding assets through depreciation and cost of capital charges.

The accounting implications for the department in 2003-04 are:

	2003-04 (£m)
Operating cost statement	
• Depreciation	0.36
• Cost of capital charge	4.82
Total	5.18

Land is not normally depreciated as it is assumed to have a non-finite life. Depreciation on the building is calculated as:

$$\text{£18 million} / 50 \text{ years} = \text{£0.36 million}$$

The cost of capital charge is calculated as 3.5% of the average net assets over the year (ie the average of opening and closing balances):

$$\frac{\text{£138m} + (\text{£138m} - \text{£0.36m})}{2} \times 3.5\% = \text{£4.82 million}$$

The implications for DCMS' budget are shown in the following table:

	2003-04 (£m)
Resource DEL	
• Depreciation	0.36
• Cost of capital charge	4.82
Total	5.18
Capital DEL	-



Case studies (1): assets

Depreciation and capital charge are non-cash costs and, as such, have no impact on the amount of cash required by the department. Thus the implications for DCMS' 2003-04 Estimate are as follows:

	2003-04 (£m)
Net resource requirement	5.18
Capital	-
<i>Accruals to cash adjustment</i>	
• <i>Cost of capital charge</i>	-4.82
• <i>Depreciation</i>	-0.36
Net cash requirement	-

Case study 1.2

1.2: Accounting implications of an NDPB holding assets

At 1 April 2003, the building housing one of DCMS' sponsored museums and galleries, a charitable NDPB, is valued at £25 million. The building is assessed to have a useful life of 50 years from 1 April 2003. The land is valued at £200 million. Additions to the museum's collection during 2003-04 include donated works with a value of £7 million and acquisitions at a cost of £3 million financed by grant in aid from the DCMS.

Questions:

What would be reflected in the museum's financial accounts for 2003-04, assuming that land and buildings values remain static over the year?

What is the budgetary cost to the DCMS of these assets during 2003-04? How would this be reflected in the department's Estimate?

Solution

This case study shows the impact on budgets, Estimates and accounts of the full cost of an NDPB holding assets through depreciation and cost of capital charges.

The accounting implications for the museum in 2003-04 are:

	2003-04 (£m)
Statement of Financial Activities*	
• Depreciation	0.5
• Cost of capital charge	7.866
Total	8.366
Balance Sheet	
• Increase in collection assets	10

* equivalent to the operating cost statement (OCS) of a department, here showing the NDPB's costs only



Case studies (1): assets

Land is not normally depreciated as it is assumed to have a non-finite life. Depreciation on the building is calculated as:

$$\text{£25 million} / 50 \text{ years} = \text{£0.5 million}$$

The cost of capital charge is:

$$\frac{\text{£225m} + (\text{£225m} - \text{£0.5m})}{2} \times 3.5\% = \text{£7.866 million}$$

The additions to the collection are not subject to a capital charge where the existing collection is not capitalised. Any depreciation charge on the additions is deemed to be insignificant.

The implications for DCMS' budget are shown in the following table:

	2003-04 (£m)
Resource DEL	
• Depreciation	0.5
• Cost of capital charge	7.866
Total	8.366
Capital DEL	
• Donated assets	-7
• Additions to collection	10
Total	3

Note that the amounts shown in the DCMS budget reflect the actual resource flows, whether funded by grant in aid or self generated funds.

The implications for DCMS' 2003-04 Estimate are as follows:

	2003-04 (£m)
Net resource requirement	3.0
Capital	-
<i>Accruals to cash adjustment</i>	-
Net cash requirement	3.0

Note that the grant-in-aid is shown under the 'Non-budget' shoulder-heading in the Estimate, since this is simply a financing transaction and it is the actual purchase of the assets by the NDPB that scores in budgets. Also, the grant in aid scores as current expenditure against the department's net resource requirement even if it finances capital expenditure by the NDPB.



Case studies (1): assets

Case study 1.3

1.3: Capitalisation policy

The Ministry of Defence (MOD) is planning a large scale development programme for the introduction of a fleet of 10 new destroyers. The programme of development, manufacture, entry into service and support runs from 2003-04 to 2012-13.

Costs will be incurred by the MOD as follows:

- a) £25m for an initial review carried out in 2003-04 and 2004-05 by external consultants in relation to the whole of the Navy's future requirements;
- b) £75m for pre-production development costs, comprising £60m for the external contractors' costs and £15m of dedicated in-house MOD staff costs, to be incurred and paid evenly across the years 2005-06 to 2007-08;
- c) £1bn to an external contractor for the manufacture and delivery of the 10 destroyers, for delivery at the rate of 2 a year from 2008-09 to 2012-13, 90% of the cost being paid in the period up to delivery and 10% to be paid one year later after extensive trials;
- d) Cost of capital charges relating to capitalised costs included above.

Questions:

Which of the costs in a) to c) above should the MOD capitalise and in which period(s), and which will it have to charge direct to its OCS/ resource DEL?

In which years will the MOD first incur a:

- cost of capital charge?
- depreciation charge?

What will be charged to the OCS/resource DEL and the capital DEL in 2003-04, 2004-05 and 2005-06, ignoring any price increases? How will this be reflected in MOD's Estimates for those years?

Solution

This case study illustrates the importance of the concept of capitalisation of expenditure in budgeting and sets out the implications for budgets, Estimates and accounts.

Expenditure relating to a development project should be capitalised where there is a clearly defined project; the related expenditure is separately identifiable; and the outcome of the project (and future funding) are reasonably certain.

This accounting treatment means that, over the course of a project, some costs will not hit the operating cost statement (OCS) or the resource DEL, and will instead be capitalised and score in the capital DEL. This example illustrates the point.



Case studies (1): assets

Thus MOD should capitalise (and score in capital DEL) the:

- £25m in each of three years from 2005-06 to 2007-08 for the pre-production development costs, because these costs relate to a clearly defined project and are separately identifiable, and the outcome of the project has been assessed with reasonable certainty as to its technical feasibility and its success in bringing into service a product that will be brought into use, and as to its funding;
- £200m for each of the five years from 2008-09 to 2012-13 for the manufacture and delivery of the 10 destroyers. Although 10% of the cost is retained for a year, the MOD should capitalise the whole cost, with £10m for each destroyer being treated as a creditor until payment is made.

The MOD should not capitalise, but charge direct to the OCS/ resource DEL:

- £25m for the initial review in 2003-04 and 2004-05 because it is not possible to identify separately the element of this cost that relates specifically to the later development programme. If the appropriate element can be identified, it could only be capitalised if the criteria outlined in the RAM were met at that time;
- any cost of capital charge over the course of the project, because the RAM specifically precludes this.

The MOD will first incur:

- a cost of capital charge in 2005-06, in relation to the capitalised development costs; and
- a depreciation charge in 2009-10, in relation to the first two destroyers that are then brought fully into service.

The charges to the MOD's OCS/ resource DEL and capital DEL in 2003-04, 2004-05 and 2005-06 will be:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL/OCS			
• Initial review	12.5	12.5	
• Cost of capital			0.44*
Total	12.5	12.5	0.44
Capital DEL			25

* calculated as 3.5% of the average of the opening net book value of £nil and the closing net book value of £25m, which is what the project would be worth by 2005-06.



Case studies (1): assets

The implications for MOD's Estimates in 2003-04, 2004-05 and 2005-06 are as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement	12.5	12.5	0.44
Capital			25
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>			-0.44
Net cash requirement	12.5	12.5	25

The costs of the initial review are charged direct to the OCS as resource DEL and impact on both the net resource requirement (NRR) and the net cash requirement (NCR) in 2003-04 and 2004-05. The cost of capital charge of £0.44m in 2005-06 is a non-cash cost and therefore affects resources but has no effect on the NCR. The £25m pre-production development costs in 2005-06 are capitalised and as such score as capital in the Estimate and affect the NCR.

Case study 1.4

1.4: Impairment

The NHS is re-equipped at the beginning of 2002-03 with new decontamination units in each hospital, representing a significant advance in British technology. The units are bought specifically for the NHS on the basis of a performance specification that would enable surgical instruments to be fully decontaminated from bacteria and from prions, the agent suspected of causing vCJD.

By November 2003, it was clear that while the new units could guarantee full decontamination of instruments against bacteria, they were not suitable for decontaminating against prions. Although this provided a better level of protection than the old system (which could not guarantee full decontamination from bacteria), it was no better than what might have been bought more cheaply from the USA.

The new units were included in the Department of Health's (DH) balance sheet in April 2003 at a gross replacement cost of £150m and a net book value of £135m. The remaining useful life of the units was estimated to be 9 years. The current cost of purchasing the alternative system from the USA with an equivalent performance is £90m and this has an estimated useful life of 20 years.

Questions:

What is the accounting and budgetary impact on DH's OCS/ resource DEL for 2003-04, 2004-05 and 2005-06 of the realisation that the system is not as effective as had been anticipated? (Ignore any increase in replacement costs.)

How would this be reflected in DH's Estimate?

Solution

This case study illustrates how diminutions in asset value and asset usefulness affect budgets, Estimates and accounts.



Case studies (1): assets

The realisation that the system is not as effective as had been anticipated is treated as an impairment, as it represents a reduction in its service potential. This would be reflected in DH writing it down to the replacement cost of the capacity to provide that lower level of service. The financial effect is to increase the charge on DH's OCS/ resource DEL for the next financial year by £46.22m, being the net effect of:

- a £7.78m reduction from £19.46m - being the anticipated depreciation (£15m) and cost of capital charge (£4.46m) for the year based on the previously assumed level of performance of the existing system over the remainder of the units' life - to £11.68m – being the new depreciation (£9m) and cost of capital (£2.68m) based on the revised level of performance of that system, assessed by reference to the US system (£90m); and
- an impairment of £54m - being the difference between the net book value (£135m) and the replacement cost (£81m).

The impact on DH's resource DEL/OCS after the impairment compared with what was expected to score is as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL/OCS:			
• Impairment	54.0		
• Depreciation	-6.0	-6.0	-6.0
• Cost of capital charge	-1.78	-1.58	-1.36
Total	46.22	-7.58	-7.36

Impairment, depreciation and capital charge are non-cash costs and, while affecting resources, have no impact on the amount of cash required by the department. The impairment is shown as depreciation in the Estimate, and the amounts voted in DH's Estimates in 2003-04, 2004-05 and 2005-06 would be as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement			
• Impairment	54.0		
• Depreciation	9.0	9.0	9.0
• Cost of capital charge	2.68	2.36	2.05
Total	65.68	11.36	11.05
Capital	-	-	-
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	-2.68	-2.36	-2.05
• <i>Depreciation</i>	-9.0	-9.0	-9.0
• <i>Impairment</i>	-54.0		
Net cash requirement	-	-	-



Case studies (1): assets

Case study 1.5

1.5: Renovation of assets

On 1 April 2004, it is decided to extensively renovate a wing of one of DCMS' sponsored museums and galleries, a charitable NDPB of the department. The estimated cost is £12m (including architects' fees of £1,500) and the works are scheduled to be undertaken over a 2 year period (£4m in 2004-05 and £8m in 2005-06). The renovations are to be funded 50% through grant in aid from the DCMS, 25% through trading activities and 25% through the National Lottery. The capitalisation threshold for the Museum is £2,000.

Questions:

What would be reflected in the museum's financial accounts for 2004-05 as a result of the renovation?

What is the budgetary cost to the DCMS of this renovation during 2004-05? How is this reflected in DCMS' Estimate?

What difference would it make if the renovation was fully funded from trading activities and the National Lottery?

Solution

This case study illustrates the impact on budgets, Estimates and accounts of various funding streams for capital expenditure.

The accounting implications for the museum in 2004-05 are as follows:

	2004-05 (£m)
Statement of Financial Activities*	
• Depreciation	-
• Cost of capital charge	0.0525
Total	0.0525
Balance Sheet	
• Land and buildings	4.0

* equivalent to the operating cost statement (OCS) of a department, here showing the NDPB's costs only

The wing is not in use at the year end, so there is no depreciation charge.

The cost of capital charge is based on the average of the opening and closing balances. 25% of the cost is exempt from a capital charge because of the National Lottery funding. Hence the opening balance is £nil and the closing balance is £3m, giving average net assets of £1.5m subject to the capital charge.

The architects' fees are capitalised on the balance sheet in land and buildings even though they are less than the asset recognition (or capitalisation) threshold which is set at £2,000. This is because the fees are part of the overall cost of renovation to the building.

Case studies (1): assets



The implications for DCMS' budget are shown in the following table:

	2004-05 (£m)
Resource DEL <ul style="list-style-type: none">• Capital charge	0.0525
Capital DEL <ul style="list-style-type: none">• Renovation	3.0

Note that the department's capital budget only reflects the element not financed by the lottery. This element will appear in DCMS' National Lottery programme.

It is the grant in aid to the museum that scores in DCMS' Estimate. Thus, assuming that the renovations are funded 50% through grant in aid, the implications for the department's 2004-05 Estimate are as follows:

	2004-05 (£m)
Net resource requirement	2.0
Capital	-
<i>Accruals to cash adjustment</i>	-
Net cash requirement	2.0

If the renovation was funded 50% from trading activities and 50% from National Lottery, then 50% rather than 25% of the amount - ie £2m - would be exempted from the capital charge calculation, giving average net assets of £1m and a capital charge of £0.035m.

Under this scenario, there would of course be no grant in aid funding through DCMS' Estimate.



Case studies (1): assets

Case study 1.6

1.6: Increased asset life

On acquisition, computer axial topography (CAT) scanners were assumed to have a working life of 4,000 hours. Later experience showed that this was too conservative an estimate and that 6,000 hours could be expected, and even 8,000 hours with a change in the Department of Health's (DH) approach to maintenance. DH's estimate of 400 hours' use per year per CAT scanner remains unchanged.

A CAT scanner originally cost £1m five years ago. Its current replacement cost is £1.5m and its current net book value, after depreciation, is £0.75m. The maintenance change would cost £0.15m a year.

Questions:

What is the accounting and budgetary impact on DH's OCS/ resource DEL for the next year, ie 2003-04 (for convenience, ignoring initially the cost of capital charge and assuming the replacement cost will not change during the year) of the extension in the scanners' life, if the change in maintenance approach:

- Is not adopted?
- Is adopted?

How would this be reflected in DH's Estimate?

Based on the figures given, should DH adopt the new maintenance approach?

Does the extension of life increase or decrease the cost of capital charge? What is the change in the cost of capital charge for next year if the rate is 3.5%, assuming the change in maintenance approach is not adopted?

Should taking account of the cost of capital charge change the decision on whether to adopt the new maintenance approach?

What will be charged to the OCS/ resource DEL over the period 2003-04 to 2005-06, again ignoring any increase in replacement costs, and on the assumption that the change in maintenance approach is not adopted?

Solution

This case study shows that decision making can and should be influenced by the most effective way of maintaining assets.

The impact on depreciation is to charge a lower annual amount to the OCS/ resource DEL, as the scanner is now to be written off over a longer remaining life. The increase in maintenance costs is charged annually to the OCS/ resource DEL since, although it has the effect of increasing the life of the scanner significantly, it is not incurred as a one-off cost. The monetary impact of factoring in the longer life to 6,000 hours (15 years) is to reduce the next year's depreciation charge to the OCS/ resource DEL (and therefore in DH's Estimate) by £0.075m:



Case studies (1): assets

- from £0.15m, based on the current net book value spread over the previously estimated life of 10 years (of which 5 years remain);
- to £0.075m, based on the current net book value spread over the newly estimated remaining life of 10 years.

The effect of changing maintenance routine to extend life to 8,000 hours (20 years), if the new maintenance approach is adopted, is to increase the total charge to the OCS/ resource DEL for next year by £0.05m:

- from £0.15m, as above;
- to £0.20m, being the sum of the depreciation charge of £0.05m based on the current net book value (£0.75m) spread over the newly estimated remaining life of 15 years and the maintenance charge of £0.15m.

So, given the increase in the charge to the OCS/ resource DEL, DH should not adopt the new maintenance approach.

The extension of life increases the cost of capital charge. This is because it is applied to the net book value that is higher for a longer period. The cost of capital charge for the next year is increased by £0.0013m:

- from £0.0236m, calculated as 3.5% of the average net book value of £0.675m, the latter being the average of the opening net book value of £0.75m and the closing net book value of £0.6m (£0.75m less depreciation of £0.15m);
- to £0.0249m, calculated as 3.5% of the average net book value of £0.7125m, the latter being the average of the opening net book value of £0.75m and the closing net book value of £0.675m (£0.75m less depreciation of £0.075m).

In this case, taking account of the cost of capital charge does not affect the decision about the maintenance approach. This is because the increase in the cost of capital charge is added to the increase in maintenance costs that already outweighs the reduction in depreciation charge.

The charges to DH's OCS/ resource DEL (rounded to the nearest £'000) will be:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL/OCS			
• Depreciation	0.075	0.075	0.075
• Cost of capital	0.025	0.022*	0.020#
Total	0.100	0.097	0.095

* Calculated as 3.5% of the average of the opening net book of £0.675m and the closing net book value of £0.60m.

Calculated as 3.5% of the average of the opening net book value of £0.60m and the closing net book value of £0.525m



Case studies (1): assets

Since depreciation and capital charges are non-cash costs, this would be reflected in DH's Estimates for 2003-04, 2004-05 and 2005-06 as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement	0.100	0.097	0.095
Capital	-	-	-
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	-0.025	-0.022	-0.020
• <i>Depreciation</i>	-0.075	-0.075	-0.075
Net cash requirement	-	-	-

Case study 1.7

1.7: Loss on disposal

As part of building strategic defence relations with a fellow NATO country, MOD decides in 2004-05 to sell a submarine to that country. The sale was not planned. The book value at 31 March 2004 is £100m. Depreciation per annum is £10m. The date of the contract of sale is 1 October 2004. The sale price is £60m.

Questions:

What is the budgetary cost to the MOD in 2003-04, 2004-05 and 2005-06 of disposing of this submarine? How does this impact on MOD's accounts? What is voted in MOD's Estimates for 2003-04, 2004-05 and 2005-06?

If, on 1 October 2003, MOD had decommissioned and decided to sell the submarine at the reduced price, but the sale does not actually occur until 1 October 2004, how does this affect the result?

Solution

This case study shows the treatment in budgets, Estimates and accounts of an asset sold at less than its net book value and the effect on depreciation and cost of capital charge.

At the time of the sale, the book value of the submarine is £100m, less half a year's depreciation of £5m - ie on 1 October 2004 the book value is £95m.

The sale price of £60m means that there is a loss on sale of £35m in 2004-05. This sale was not planned, so the projected loss on sale was not included in MOD's resource DEL provision. Therefore, MOD will incur a hit of £35m on its resource DEL in 2004-05.

Savings would accrue to MOD in 2004-05 for both depreciation (half a year, or £5m) and cost of capital charge ($3.5\% \times \frac{1}{2} \times £92.5m [= (£95m + £90m) / 2] = £1.62m$), since the asset will not be held for the second half of the year. There will be continuing savings in subsequent years. The effect of this change on MOD's budget and accounts is summarised below:



Case studies (1): assets

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL/OCS:			
• Loss on disposal		35	
• Depreciation		-5	-10
• Cost of capital charge		-1.62	-2.98
Total		28.38	-12.98
Capital DEL/Balance Sheet			
• NBV of disposed asset		-95	

Loss on sale of assets, depreciation and capital charge are non-cash costs and, while affecting resources in the Estimate, have no impact on the amount of cash required by the department. The £60m income from the sale of the submarine scores as a capital receipt (non-operating appropriations in aid) in the Estimate and affects the net cash requirement (NCR).

Thus the amounts voted in MOD's Estimates in 2003-04, 2004-05 and 2005-06 are as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement			
• Loss on disposal		35	
• Depreciation	10	5	
• Cost of capital charge	3.68	1.71	
Total	13.68	41.71	
Capital			
• Non operating AinA		-60	
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	<i>-3.68</i>	<i>-1.71</i>	
• <i>Depreciation</i>	<i>-10</i>	<i>-5</i>	
• <i>Profit/loss on sale of assets</i>		<i>-35</i>	
Net cash requirement	-	-60	

If, on 1 October 2003, MOD had decommissioned and planned to sell the submarine at the reduced price, the book value of the submarine in the 2003-04 accounts should have been reduced to its net realisable value of £60m.

This means that the net cost of the sale would have been £45m against the 2003-04 resource DEL, rather than £35m against the 2004-05 resource DEL. The £10m difference relates to the £5m depreciation in the second half of 2003-04 and the £5m depreciation in the first half of 2004-05, which are now included in the impairment amount of £45m.



Case studies (1): assets

Thus, under this scenario, MOD would realise ongoing savings from a reduction in depreciation and in the cost of capital charge from the permanent reduction in its net asset values in 2003-04.

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL/OCS			
• Impairment	45		
• Depreciation	-5	-10	-10
• Cost of capital charge*	-0.75	-2.28	-2.98
Total	39.25	-12.28	-12.98
Capital DEL/Balance Sheet			
• NBV of disposed asset		-60	

* Calculated on the basis of the average of opening and closing values

The impairment in 2003-04 of £45m is a non-cash cost (alongside depreciation and cost of capital) and, while affecting resources, has no impact on the amount of cash required by the department. The impairment is included as depreciation in the Estimate.

Thus MOD's Estimates in 2003-04, 2004-05 and 2005-06 would show the following:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement			
• Impairment	45		
• Depreciation	5		
• Cost of capital charge	2.93	1.05	
Total	52.93	1.05	
Capital			
• Non operating AinA		-60	
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	<i>-2.93</i>	<i>-1.05</i>	
• <i>Depreciation</i>	<i>-50</i>		
Net cash requirement	-	-60	

Case studies (1): assets



Case study 1.8

1.8: Purchase and sale of assets

At the start of 2003-04, the NHS in Scotland lets a contract for the building of a new hospital. The total value of the contract is £200m, and by 31 March 2004 the hospital is half built and a stage payment of £100m has been made. The hospital enters service on 31 March 2005 and the final payment of £100m is made.

The new hospital is revalued on entering service. Surveyors estimate that the cost of replacing the hospital would be only £150m, of which £25m is the value of the land. The hospital building is expected to last for 50 years. At the end of 2005-06, the value has increased from £150m to £155m, with the land value unchanged.

The old hospital has a net book value in the accounts of £10m at the start of 2003-04, of which £5m is the value of the land. Surveyors estimate that it could sell for £5m. As the new hospital enters service on 31 March 2005, the old hospital is closed and put on the market. On 31 March 2006, it is sold for £4m.

Questions:

What is the budgetary impact of the purchase of the new hospital over the period 2003-04 to 2005-06? How is this reflected in Estimates and accounts? Specifically consider:

- At the end of 2003-04, does the NHS have an asset on which there should be a capital charge and a depreciation charge? Would this be different if it had not made a stage payment of £100m?
- What is the impact of the lower value placed on the hospital when it is brought into service? The NHS is not considering replacing the hospital, so is the lower replacement cost relevant?
- What capital charges and depreciation should be scored?

What is the budgetary impact of the sale of the old hospital over the period 2003-04 to 2005-06? How is this reflected in Estimates and accounts? Specifically consider:

- What value should be placed on the unused hospital in the period before it is sold (ie at 31 March 2005) and what are the implications?
- What is the budgetary impact of the sale (ie at 31 March 2006)? How should the lower sale value be scored?
- What capital charges and depreciation should be scored?
- What differences would there be if the sale was not completed until 31 March 2007, and it was sold for only £3m?



Case studies (1): assets

Solution

This case study shows the impact on budgets, Estimates and accounts of buying assets and selling assets at a loss.

Capital expenditure and the profit or loss of NHS Trusts, including capital charges and depreciation, score in the NHS Executive's capital and resource DEL.

Purchase of the new hospital At the end of 2003-04, the NHS has an asset in the course of construction. The value of the work (£100m) will go to the balance sheet and score to capital DEL. This would be the case even if no money had been paid.

There would be a capital charge in 2003-04 based on the average value of the net assets across the year (ie $\frac{£100m}{2} \times 3.5\% = £1.75m$). There is no depreciation charge, as the hospital has not yet been used.

The hospital is a specialised asset and probably does not have an open market value as a hospital. The valuation should be based on the cost of replacing the hospital and not on the amount paid. The drop in value of £50m must be shown in the Trust's income and expenditure (I&E) account and thus in the NHS Executive's resource DEL. (In cases where the value of an asset falls following years in which it has increased it is possible to avoid taking the reduction to the I&E account – this is not the case here as it is a new building.) However, the total amount paid to bring the hospital into service is reflected in the capital DEL, ie a further £100m.

The cost of capital in 2004-05 is based on the average asset value, ie:

$$\begin{aligned} & \frac{(\pounds100m + \pounds150m)}{2} \times 3.5\% \\ & = \pounds4.375m \end{aligned}$$

In 2004-05, again there is no depreciation charged as the hospital was not in use during the year.

Depreciation from 2005-06 is based on the average value of the asset and charged over its life usually in equal amounts. No depreciation is charged on land as it is assumed to have a non-finite life. The depreciation charge in 2005-06 is therefore:

$$\begin{aligned} & \left[\frac{(\pounds150m + \pounds155m)}{2} - \pounds25m \right] / 50 \text{ years} \\ & = \pounds2.55m \end{aligned}$$

Capital charge in 2005-06 is calculated as:

$$\frac{\pounds150m + (\pounds155m - \pounds2.55m)}{2} \times 3.5\% = \pounds5.293m$$



Case studies (1): assets

The impact of the purchase over the period 2003-04 to 2005-06 is as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL/OCS			
The Trust's profit/ loss from:			
• Impairment		50	
• Depreciation			2.55
• Capital charge	1.75	4.375	5.293
Total	1.75	54.375	7.843
Capital DEL			
• Asset purchase	100	100	

Impairment, depreciation and capital charge are non-cash costs and, while affecting resources in the Estimate, have no impact on the amount of cash required. The £100m stage payment in 2003-04 and the £100m final payment in 2004-05 for the cost of the new hospital score as capital spending in the Estimate and affect the net cash requirement (NCR). The impairment is shown in the Estimate against depreciation.

This would be reflected in Estimates in 2003-04, 2004-05 and 2005-06 as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement	1.75	54.375	7.843
Capital	100	100	
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	-1.75	-4.375	-5.293
• <i>Depreciation</i>			-2.55
• <i>Impairment</i>		-50.0	
Net cash requirement	100	100	-

Sale of the old hospital In 2003-04, the old hospital is expected to become surplus to requirements when the new hospital comes into service. The accounts should take account of the fact that the old hospital has only 2 productive years left.

Thus, the depreciation charge in each of 2003-04 and 2004-05 is £2.5m. By the time the hospital is vacated, the value in the accounts will be the same as (what they expect) it can be sold for.

Capital charge is based on the average value in the accounts after taking into account the depreciation charge of £2.5m in each year, ie:

$$\text{For 2003-04: } (\text{£}10\text{m} + \text{£}7.5\text{m}) / 2 \times 3.5\% = \text{£}0.31\text{m}$$

$$\text{For 2004-05: } (\text{£}7.5\text{m} + 5\text{m}) / 2 \times 3.5\% = \text{£}0.22\text{m}$$



Case studies (1): assets

At the end of 2005-06, the asset is sold. There is a loss on sale because the proceeds (£4m) are less than the value in the accounts (£5m). The £1m loss is taken to the Trust's I&E account and is thus a charge to resource DEL. This was not budgeted for.

There is no depreciation charge for 2005-06, because the asset is not in use. Capital charge is based on the average value in the accounts, which for nearly all of the year was £5m:

$$£5m \times 3.5\% = £0.175m$$

The budgetary impact of the sale in 2003-04, 2004-05 and 2005-06 is shown in the following table:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL			
The Trust's profit/ loss from:			
• Depreciation	2.5	2.5	
• Capital charge	0.31	0.22	0.175
• Loss on sale			1.0
Total	2.81	2.72	1.175
Capital DEL			
• NBV of disposed assets			-5.0

In Estimates, the total of the book value (£5m) minus the loss from the asset sale (£1m) (ie the proceeds) scores as a £4m capital receipt (non-operating appropriation in aid) in 2005-06. The loss of £1m also scores as resource expenditure along with the depreciation and capital charge. The inclusion of the loss is necessary both to get to the correct figure for non-operating appropriations in aid and to reflect its treatment as (non-cash) spending in the OCS.

The double counting of the loss elements in both the resource and capital sides of the Estimate is removed as an accruals to cash adjustment in the Part II: Resource to cash reconciliation table. This would be reflected in Estimates in 2003-04, 2004-05 and 2005-06 as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement	2.81	2.72	1.175
Capital			
• Non operating AinA			-4.0
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	<i>-0.31</i>	<i>-0.22</i>	<i>-0.175</i>
• <i>Depreciation</i>	<i>-2.5</i>	<i>-2.5</i>	<i>-</i>
• <i>Profit/loss on sale of assets</i>			<i>-1.0</i>
Net cash requirement	-	-	-4.0



Case studies (1): assets

In practice there can be uncertainty about when an asset held for disposal will actually be sold, and in some cases uncertainty about what the sale price will be. The amounts involved can be large and where there is a loss on sale this will probably not have been provided for in the budget.

If the sale slips to 2006-07, and only £3m is made, there will be a cash shortfall in 2005-06. The loss on sale will be deferred but this is also unlikely to have been provided for in the budget. A capital charge will be levied for the period in which the asset is retained; this will lead to a further charge to resource DEL.

	2005-06 (£m)	2006-07 (£m)
Resource DEL		
The Trust's profit/ loss from:		
• Depreciation		
• Capital charge	0.175	0.175
• Loss on sale		2.0
Total	0.175	2.175
Capital DEL		
• NBV of disposed assets		-5.0

The additional capital charge and the loss on sale score as resources in Estimates in 2006-07 but, as non-cash costs, have no effect on the NCR. The total of the book value (£5m) minus the loss from the asset sale (£2m) (ie the proceeds) scores as a £3m capital receipt (non-operating appropriation in aid) in 2006-07. Again, the double counting of the loss elements in both the resource and capital sides of the Estimate are removed as an accruals to cash adjustment in the Part II: Resource to cash reconciliation table.

This would be reflected in Estimates in 2005-06 and 2006-07 as follows:

	2005-06 (£m)	2006-07 (£m)
Net resource requirement	0.175	2.175
Capital		
• Non operating AinA		-3.0
<i>Accruals to cash adjustment</i>		
• <i>Cost of capital charge</i>	<i>-0.175</i>	<i>-0.175</i>
• <i>Depreciation</i>		-
• <i>Profit/loss on sale of assets</i>		<i>-2.0</i>
Net cash requirement	-	-3.0



Case studies (1): assets

Case study 1.9

1.9: Destruction of assets

An older part of one of DCMS' sponsored museums and galleries – a charitable NDPB of the department – is destroyed by fire in early October 2004. The losses amount to an estimated £6m in damages to the building and a loss of £20m to the collection. £2m of the collection was acquired since 1 April 2001.

Questions:

What is the budgetary cost to the DCMS of this damage during 2004-05 and in subsequent years? What are the funding options of the loss that may be considered by DCMS?

What would be reflected in the museum's financial accounts for 2004-05? And in DCMS' 2004-05 Estimate?

What difference would it make if the collection which was destroyed was all acquired after 1 April 2001?

Solution

This case study explores the consequences for budgets, Estimates and accounts of the destruction of fixed assets and irreplaceable heritage assets.

The accounting implications for the museum are as follows:

	2004-05 (£m)
Statement of Financial Activities	
• Loss of building	6.0
• Loss of collection	2.0
• Reduction in depreciation	X
• Reduction in capital charge	Y
Total	Z
Balance Sheet	
• Reduction in land and buildings	-6
• Reduction in collection	-2

In general, collections existing at 31 March 2001 need not be capitalised. Additions to collections after this date are capitalised and recognised in the Balance Sheet, at the cost or value of the acquisition, where such a cost or valuation is reasonably obtainable and reliable. Such items are not depreciated or revalued as a matter of routine. The exception to this is permanent exhibitions, which are subject to wear and tear and are generally depreciated over 20 years.

As only £2m of the collection was acquired since 1 April 2001, only the loss of £2m is included in the accounts. However, a note should be included in the accounts stating the full extent of the loss of the collection - ie £20m.

A reduction in depreciation (X above) would result as the value of the building would now be £6m lower, depreciated over the residual asset life. The capital charge would also reduce (Y above) due to the loss of the building, but not by the loss of the collection, which is exempt from the capital charge.



Case studies (1): assets

The implications for DCMS' budget are shown in the following table (there would be no direct impact from these changes on DCMS' Estimate):

	2004-05 (£m)	Future years (£m)
Resource DEL		
• Impairment	8	Note 1
• Reduction in capital charge and depreciation	(X+Y)	
Capital DEL	-	-

Note 1: it would be important for DCMS to establish which entity will bear any ongoing costs or savings to depreciation and cost of capital charge in future years.

In terms of funding options for DCMS, subject to any explicit upfront agreement to the contrary, the loss of £8m could be dealt with by DCMS in a range of ways including:

- full supplementation by increasing grant in aid to allow the museum to finance repair and replacement of assets, financed either from existing DCMS DEL provision or, in full or in part, from the DEL Reserve;
- part supplementation (eg 50% or some other proportion as agreed); or
- the museum pays the full cost from its own sources.

The implications for DCMS' Estimate would depend on which option was chosen. If grant in aid funding to the museum were increased, this would impact on the net resource requirement (NRR) and net cash requirement (NCR) in the Estimate.

If all the collection were acquired post 1 April 2001, the full amount of the loss would be recorded in the museum's Statement of Financial Activities and Balance Sheet.

Case study 1.10

1.10: Infrastructure assets

At 1 April 2004, the value of the road network is £64 billion. The budgeted increase in the road network is based on annual movement in the Resource Cost Index of Road Construction (ROCOS) of 3%. The balance on the revaluation reserve relating to roads is £3 billion. Maintenance incurred during the year is £600 million.

Questions:

What is the budgetary impact if the annual movement in the ROCOS is 6%?

What is the budgetary impact and the impact on the 2004-05 Estimate and resource accounts if the movement in the ROCOS gives rise to a downward revaluation of the network of £2 billion and the annual condition survey of the road network shows that the physical condition of the network improved by £70 million. Specifically:

- What is the impact on the OCS and the balance sheet?
- What is the impact on resource DEL, capital DEL and AME?
- What happens to the depreciation charge and cost of capital charge?

In the above situation what happens if the balance on the revaluation reserve relating to roads at 1 April 2004 is £1.8 billion?



Case studies (1): assets

Solution

This case study covers the special budgeting treatment of the roads network, when the cost of capital charge remains in AME.

Infrastructure assets, including the road network, are accounted for using a variant of renewals accounting, supplemented by annual condition surveys as a method of approximating depreciation. The differences between this method of accounting and that for other fixed assets are that:

- all renewals expenditure should be charged to the OCS as a proxy for the depreciation charge; and
- an annual condition survey must be undertaken to determine the overall condition of the network in order to derive its actual consumption during the year. If the survey reveals that the network has been maintained in a steady state since the previous survey, the renewals expenditure is an acceptable proxy for the depreciation charge. However, if the condition of the network has deteriorated/ improved between surveys, the value of the impairment or improvement, if material, should be charged or credited to the OCS.

The road network is valued on the basis of current replacement cost depreciated to reflect the overall condition of the network. The Highways Agency uses the ROCOS to obtain the value of the road network.

In general, the budgeting treatment of fixed assets is that:

Resource DEL scores:

- depreciation
- impairments
- *less profit / plus loss on the disposal of fixed assets*
- cost of capital charges

Capital DEL scores:

- *plus additions to the balance sheet*
- *less the book value of asset disposals.*

Revaluation gains and losses charged to the Statement of Recognised Gains and Losses (SRGL) do not score in resource or capital DEL.

The budgeting treatment for the road network for SR2004 is that the cost of capital charge on the network remains in AME. All maintenance costs will be charged to resource DEL in line with the charge to the operating cost statement.

In the light of this, the answers to the questions in this case study are as follows.

If the actual annual movement in the ROCOS was 6% rather than 3%, the budgetary impact arising from the increased cost of capital charge would be:

Case studies (1): assets



	Opening balance (£m)	2004-05 (£m)
Budgetary impact		
Budgeted valuation at 31 March 2005 = 64 x 1.03		£65.92 billion
Budgeted cost of capital charge for 2004-05 = (64+65.92)/2 @ 3.5%		£2.27 billion
Actual valuation at 31 March 2005 = 64 x 1.06		£67.84 billion
Actual cost of capital charge for 2004-05 = (64+67.84)/2 @ 3.5%		£2.31 billion
Additional resource outturn as a result of ROCOS		£33.6 million

The detailed budgetary impact and the impact in the Estimates and accounts for 2004-05 reflecting the scenario outlined above is shown in the following tables:

Operating cost statement	
Maintenance (proxy for depreciation)	600
Adjustment for annual condition survey	-70
Impairment	-
Cost of capital = (64,000+62,070)/2 @ 3.5%	2,206
	2,736
Net operating cost	
Statement of recognised gains and losses	
Revaluation (gains) / losses	2,000

Balance sheet		
Road network	64,000	62,070
Revaluation reserve	3,000	1,000

Capital DEL	
Adjustment for annual condition survey	-



Case studies (1): assets

	Opening balance (£m)	2004-05 (£m)
Resource DEL		
Maintenance (proxy for depreciation)		600
Adjustment for annual condition survey		-70
Cost of capital		-
		530
Resource AME		
Cost of capital		2,206

Estimate		
Net resource requirement		2,736
Capital		-
<i>Accruals to cash adjustments</i>		
<i>Cost of capital</i>		-2,206
<i>Annual condition survey</i>		70
Net cash requirement		600

If the balance on the revaluation reserve relating to roads at 1 April 2004 was £1.8 billion rather than £3 billion:

	Opening balance (£m)	2004-05 (£m)
Operating cost statement		
Maintenance (proxy for depreciation)		600
Adjustment for annual condition survey		-70
Impairment		200
Cost of capital (as above)		2,206
		2,936
Statement of recognised gains and losses		
Revaluation (gains) / losses		1,800

Case studies (1): assets



	Opening balance (£m)	2004-05 (£m)
Balance sheet		
Road network	64,000	62,070
Revaluation reserve	1,800	-
Capital DEL		
Adjustment for annual condition survey		-
Resource DEL		
Maintenance (proxy for depreciation)		600
Adjustment for annual condition survey		-70
Impairment		200
Cost of capital		-
		730
Resource AME		
Cost of capital		2,206
Estimate		
Net resource requirement		2,936
Capital		-
<i>Accruals to cash adjustments</i>		
<i>Cost of capital</i>		-2,206
<i>Impairment</i>		-200
<i>Annual condition survey</i>		70
Net cash requirement		600



Case studies (2): stock

This section considers a fictitious case study relating to the implications for budgets, Estimates and accounts of the purchase, consumption and write off of stock.

Case study 2.1

2.1: Stock

As a result of recent flooding emergencies and the involvement of the Army in the rescue operations, the Ministry of Defence (MOD) has to buy in a range of consumable items during 2003-04.

In all, total purchases of new stock amount to £20m, of which the department has used £5m. The department has also run down its pre-existing supplies - £90m of balance sheet stocks have been used up as part of the effort, and £10m of stocks were found to have been damaged and have been written off. For simplicity, assume that all of these events occur on 1 January 2004.

Question:

What are the consequences for MOD's budget, Estimate and accounts of the Army's involvement in the rescue operation?

Solution

This case study explores the treatment in budgets, Estimates and accounts of managing stock. Cost of capital charge is calculated on stock held. Stock scores in resource DEL when it has been consumed or written off, not when it is purchased or sold.

The budgetary consequence of the MOD's involvement in the operation is a £105m hit on the department's resource DEL, as it has consumed this amount of stock (£95m stock used plus £10m stock written off). The department would need to absorb the £105m cost (offset by reduced cost of capital charge – see below) from within its resource DEL, or else make a claim on the Reserve.

The purchase of additional stock does not score against departmental budgets until it is used, so the £15m unused new stock is not relevant in budgeting terms, though the full £20m cost of the new stock purchased will score in Estimates as part of the department's net cash requirement.

Stock on the balance sheet incurs a cost of capital charge in resource DEL. This means that the budgeting regime gives departments a clear disincentive to pile up stocks, to avoid incurring the charge. Cost of capital charge in this example is calculated as follows:

$$[\text{£}100\text{m} \times \frac{3}{4}] + [\text{£}15\text{m} \times \frac{1}{4}] \times 3.5\% = \text{£}2.76\text{m}$$



Case studies (2): stock

Also, in replenishing their stocks, departments will need to take a view as to the lifespan of the stock and the likelihood of it being used in future years. If, as in this case, part of the stock becomes obsolete or useless, it will be written off and this will score against DEL.

Of the £100m of stock at the start of the year and £20m purchased during the course of the year, only £15m remains on the balance sheet at the year-end. Therefore, the net movement in stock on the Balance Sheet during the year is a reduction of £85m.

In summary, the impact on MOD's accounts, budgets and Estimates for 2003-04 is as follows:

Accounts	2003-04 (£m)
Operating cost statement	
• Stock consumption	95
• Stock write off	10
• Cost of capital charge	2.76
Total	107.76
Balance sheet	
• Stock	-85

Budgets	2003-04 (£m)
Resource DEL	107.76
Capital DEL	-

Estimates	2003-04 (£m)
Net resource requirement	107.76
Capital	-
<i>Accruals to cash adjustment</i>	
• <i>Cost of capital charge</i>	<i>-2.76</i>
• <i>Increase(+)/Decrease(-) in stock</i>	<i>-85.0</i>
Net cash requirement	20



Case studies (3): provisions

This section examines two fictitious case studies relating to the impact on budgets, Estimates and accounts of the setting up and unwinding of provisions, and the cash consequences.

Case study 3.1

3.1: Provisions

It is September 2005. The Ministry of Defence (MOD) has always been confident that it would be able successfully to fend off challenges for compensation from veterans alleging that MOD negligence exposed them to a debilitating disease. Consequently, MoD did not budget for compensation costs in its SR2004 allocation.

In September 2005, four former soldiers bring a test case to the High Court. Unexpectedly, they win, and are awarded damages of £250,000 each.

Campaigners for compensation say that more cases will follow, and call on the MOD to make a standard offer to all affected ex-servicemen. Whilst the campaigners say that there are 10,000 people entitled to compensation, the MOD is confident that the real figure is 5,000.

By March 2006 it has become clear that the MOD will have to pay compensation over two years, and that it will pay half the total amount in each of 2006-07 and 2007-08.

Questions:

What is the budgetary cost to MOD of losing this case? (Ignore the effect of discounting and cost of capital credit in this case study, and also the effect of inflation.) When would it score?

Where would the resource cover come from? Do MOD have it?

If cover were provided for this hit, for example from the Reserve, what conditions should be attached to it?

What is the relationship between the provision incurred and the cash paid? How does the financing work?

What difference would it have made if it was considered in April 2004 that the case scheduled for September 2005 might be lost?

Suppose that in 2006-07 MOD appeals, and although the court does not overturn the finding in favour of the plaintiff, it reduces the compensation award to £100,000 each. What difference might this make?

Solution

This case study shows how the accounting concept of provisions affects budgets, Estimates and accounts. The resource budget must include such committed expenditure, even if the cash does not fall payable in that year.



Case studies (3): provisions

Provisions score in DEL on an accruals basis. This means that the provision scores in the OCS when the provision is incurred, rather than when the money is paid out.

Therefore a provision would be booked in MOD's accounts in 2005-06, the year in which the liability came to light. Since it was unexpected, MOD would not have registered this provision in earlier years' accounts, nor would it have budgeted for it in SR2004.

The provision scored should be the best estimate of what MOD thinks it will have to pay out. This would be:

Level of compensation x number of those entitled

ie £0.25m x 5,000 = £1.25bn

This means there is a hit of £1.25bn on MOD's resource DEL in 2005-06.

MOD is unlikely to have cover for this, as it did not budget for it. Given the amounts involved, there is little doubt there would be a Reserve claim. In view of this, it is important to:

- (a) give the department maximum incentive to keep the level of claims to a minimum; and
- (b) not allow a windfall gain.

If a Reserve claim were to be approved, any downward revaluation in the provision would be surrendered (see below) and the presumption is that any upward revaluation would be met by the department.

The financing is done through the Estimate. The net resource requirement scores the provision on an accruals basis. When the money actually comes to be paid out, this will be financed through the "Use of provisions" line in the accruals to cash adjustment. This information is also needed on the database as it is the cash paid out that scores in the fiscal aggregates.

The flows would score in budgets as follows:

	2005-06 (£m)	2006-07* (£m)	2007-08 (£m)
Resource DEL	1,250	-*	-*
Capital DEL	-	-	-

* Cash paid + 625; unwind of the provision -625. Net effect on DEL is zero.



Case studies (3): provisions

This would be reflected in Estimates as follows:

	2005-06 (£m)	2006-07* (£m)	2007-08 (£m)
Net resource requirement	1,250	-*	-*
Capital	-	-	-
<i>Accruals to cash adjustment</i>			
• <i>New provisions and adjustments to previous provisions</i>	-1,250		
• <i>Use of provisions</i>		625	625
Net cash requirement	-	625**	625**

* The effect on the NRR in 2006-07 and 2007-08 is zero because the provision scores in the NRR when it is incurred (ie 2005-06).

** Reflects the level of cash expected to be paid as compensation in 2006-07 and 2007-08.

If it was considered in April 2004 that this case might be lost, MOD should declare it as a contingent liability. They would then consider bidding for it in the 2004 Spending Review. If the bid were approved, the provision should be ring-fenced - ie the cover would have to be returned if MOD won the case.

If, in 2006-07, the level of compensation was reduced to £100,000 per claimant, this would reduce the provision from £1.25bn to £0.5bn (£100,000 x 5,000). The budgetary effect would be as follows:

	2005-06 (£m)	2006-07 (£m)	2007-08 (£m)
Resource DEL	1,250	-750	-
Capital DEL	-	-	-

Thus there would be a windfall gain in 2004-05 of £750m. Under the SR2004 budgeting rules, this would have to be surrendered.

Case studies (3): provisions



Case study 3.2

3.2: Provisions

The Department for International Development (DFID) makes contributions to a number of international financial institutions (IFIs). Once authorised, DFID lodges promissory notes with the Bank of England allowing the IFIs to draw on the funds as they need them. DFID needs to make a payment only when the IFIs call on the funds. DFID is allocated a shareholding in return for contributions made.

On 2 April 2003, DFID issued promissory notes of £16.7m in respect of the Asian Development Fund. DFID already had similar obligations to the Fund of £105.3m. The timetable for making payments covers a number of years, but in principle the Fund could draw on the funds straight away. The timetable provides for an annual payment to the Fund of £34.3m. This is due on 1 April each year and is paid within 30 days.

The Asian Development Fund lends out a fixed proportion of all the amounts it receives and the remainder is spent on administration. Thus, the net assets of the Fund do not change significantly from year to year. Thus, the value of DFID's shareholding tends not to change from year to year.

Questions:

What is the impact of entering into this promissory note obligation and when would it score in DFID's budgets, Estimates and accounts?

What is the relationship between the obligation incurred and the cash paid? How would the financing work?

Should the financing of the contributions score as resource or capital expenditure?

Solution

This case study looks at the treatment in budgets, Estimates and accounts of a change in provision as a result of partial unwinding.

As noted in the previous case study, provisions score in DEL on a resource basis. This reflects the fact that provisions are charged to the OCS when the provision is incurred, rather than when the money is paid out.

DFID should therefore increase its provision by £16.7m in 2003-04, adding to the existing provision of £105.3m that has been set up in previous years. The provision reflects the fact that DFID is required to make payments in the future but has an obligation to the Fund as soon as promissory notes are entered into.

Thus DFID should set up a provision for the full amount of each promissory note, even though the timetable for making payments shows that smaller annual payments are expected to be made.

The actual annual payments of £34.3m will be charged against the existing provision because DFID has an obligation to pay £105.3m from previous years' promissory notes. In principle, the Fund could draw on all of the promissory notes entered into all in one go rather than over a number of years.



Case studies (3): provisions

The changes in the provision are thus:

Opening provision	£105.3m
less payments	<u>£34.3m</u>
	£71.0m
add new provision	<u>£16.7m</u>
Closing balance	£87.7m

The £34.3m payment made is financed through the net cash requirement in the Estimate and is reflected in the "Use of provisions" line in the accruals to cash adjustment. This information is also needed on the database as it is the cash paid out that scores in the fiscal aggregates.

New promissory notes totalling £16.7m are included in resource DEL/ OCS and the net resource requirement in the Estimate scores the provision on an accruals basis. The budgetary impact would be:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL	16.7	-*	-*
Capital DEL	-	-	-

* Cash paid is +34.3; utilisation of the provision is -34.3. Net effect on DEL is zero.

This would be reflected in Estimates as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement	16.7	-*	-*
<i>Accruals to cash adjustment</i>			
• <i>New provisions and adjustments to previous provisions</i>	-16.7		
• <i>Use of provisions</i>	34.3	34.3	34.3
Net cash requirement**	34.3	34.3	34.3

* The effect on the NRR in 2004-05 and 2005-06 is zero because the new provision of £16.7m scores in the NRR when it is incurred (ie 2003-04).

** Reflects the annual payment of £34.3m to the Fund.

Case studies (4): contingent liabilities



This section involves a fictitious case study which considers the circumstances in which a contingent liability should be noted in a department's accounts.

Case study 4.1

4.1: Contingent liabilities

The Department for Environment, Food and Rural Affairs (DEFRA) is facing a number of claims for compensation outside the existing compensation schemes. It is possible that some of the claims may have to be paid by DEFRA following legal action, but the department has no clear idea how much money might be involved.

On 1 March 2004, a contractor issues a writ claiming damages of £4m for breach of contract following the department's decision to terminate decontamination work. DEFRA has lodged a counter-claim as it believes that it has paid the contractor £2m for work that has not been done. The case will not be heard until some time in 2004-05, but DEFRA's lawyers believe there is a good chance that the contractor's case will fail and DEFRA's case will succeed.

Questions:

Should DEFRA set up a provision for the new claims?

What are the implications for budgets, Estimates and accounts of the writ issued by the contractor and DEFRA's counter-claim?

Solution

This case study covers the difference between a provision and a contingent liability. The recording of a contingent liability does not affect the budget, but might be considered in spending reviews as part of the overall pressures faced by a department.

No provisions should be established unless it is likely that DEFRA will have to pay compensation and the amount can be estimated reliably. A contingent liability should be noted in the Estimates and accounts where it is not probable that a payment will be made, or if the amount either cannot be estimated, or cannot be estimated reliably.

DEFRA will have difficulty in identifying which claims are likely and which are less than likely to result in a pay-out, but this should not absolve the department from estimating, with legal advice where necessary, how many claims are likely to succeed and the likely level of payments.

There are no budgetary or accounting implications of the contractor's writ or DEFRA's counter-claim (other than legal costs). DEFRA should show a contingent liability for the writ in the Notes to the Estimates and accounts. There is no provision because DEFRA considers that the case is not likely to succeed and thus there is no hit on its resource DEL or Estimate. The Notes to the Estimate should however include details of any contingent liabilities in force which, if they matured, would involve voting additional expenditure through the Estimate. Contingent liabilities in this context refer to those required to be reported under Chapter 26 of *Government Accounting*.

Although DEFRA's counter-claim seems likely to succeed, on the grounds of prudence the department should not establish an asset (the obverse of a provision in this case). It may however note a contingent asset if it is probable that it will receive money as a result of the case.



Case studies (5): cash

This section examines a fictitious case study relating to the use of accumulated cash surpluses to finance new investment.

Case study 5.1

5.1: Cash surpluses

One of the Department for Transport's (DfT) NDPBs has had significant surpluses over a number of years which have accumulated as cash at a commercial bank. In 2003-04, the NDPB wants to draw down £50m of these cash reserves to fund a modernisation of its IT systems. Assume that the IT systems investment occurs at the start of the year and has a life of 5 years.

Question:

What will be the impact of the investment on the DfT's budgets, Estimates and accounts in 2003-04?

Solution

This case study demonstrates that cash does not automatically convey spending power.

Budgeting scores what is spent, irrespective of how expenditure is funded. DfT's NDPB is a public body and contributes to public spending.

So if this investment is approved, it would hit DfT's capital DEL. The department would have to find offsetting savings elsewhere within its capital budget or seek a claim on the Reserve. This is in spite of the fact that the investment does not score in DfT's Estimate or accounts, which record only the department's own transactions (including the grants in aid to its NDPBs), but not the NDPBs' own transactions.

Depreciation on the IT systems investment is calculated as:

$$\text{£50 million} / 5 \text{ years} = \text{£10 million}$$

The new IT equipment would incur a cost of capital charge which, like the depreciation charge, scores in resource DEL. The cost of capital charge is calculated as 3.5% of the average net assets over the year (ie the average of opening and closing balances):

$$\frac{\text{£50m} + (\text{£50m} - \text{£10m})}{2} \times 3.5\% = \text{£1.575m}$$

Accumulated cash surpluses also attract a capital charge, which scores in resource DEL. This means that there is an incentive for bodies not to pile up cash. However, in this case, since the £50m was spent at the start of the year, there is no capital charge on it in 2003-04.

Case studies (5): cash



Thus the treatment in DfT's accounts, budgets and Estimates for 2003-04 is as follows:

Accounts	2003-04 (£m)
OCS	-
Balance sheet	-

Budgets	2003-04 (£m)
Resource DEL	
• Depreciation	10
• Cost of capital charge	1.575
Total	11.575
Capital DEL	50

Estimates	2003-04 (£m)
Net resource requirement	-
Capital	-
<i>Accruals to cash adjustment</i>	-
Net cash requirement	-



Case studies (6): NDPBs

This section examines a fictitious case study relating to the treatment of non-departmental public bodies (NDPBs).

Case study 6.1

6.1: Research Councils

The Research Councils are executive NDPBs funded mostly by grant from the Department of Trade and Industry (DTI), but with other sources of income. They also have substantial asset holdings. NDPBs are treated in budgets (but not in Estimates or accounts) on a fully consolidated basis, ie their resource consumption and capital investment score in resource DEL and capital DEL respectively.

Forecast information associated with the Research Councils is set out in the following table. For simplicity, the Research Councils' income has been omitted from this case study.

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Current grant	899	926	953
Capital grant	225	231	238
Non grant current	90	93	95
Non grant capital	11	12	12
Depreciation	85	91	94
Cost of capital	63	67	71

Question:

What is the impact of the Research Councils' spending on the DTI's budgets, Estimates and accounts?

Solution

This case study shows the treatment of NDPBs in departments' budgets, Estimates and accounts. NDPBs score in budgets on the basis of full resource consumption and new capital investment, whereas in Estimates and accounts only the actual payments made by departments are recorded.

The impact on DTI's budget is as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL			
• Current spending (cash)*	989	1,019	1,048
• Depreciation	85	91	94
• Cost of capital	63	67	71
Total	1,137	1,177	1,213
Capital DEL **	236	243	250

* sum of current grants and other current spending

** sum of capital grants and other capital spending



Case studies (6): NDPBs

The effect is to bring more fully into DTI's budget the full costs of the research councils' activities. This means that, within the overall DEL, NDPBs are subject to the same pressures and incentives of resource budgeting as the department. It is important to remember that DEL cover is required for all types of spending, irrespective of how it is financed. This is because it is all considered to be public spending.

In Estimates and accounts, however, only the transactions between the department and its NDPB are recorded:

<i>DTI accounts</i>	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Operating Cost Statement			
• Grant payments	1,124	1,157	1,191

<i>DTI Estimates</i>	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement			
• Grant-in-aid to research councils	1,124	1,157	1,191
Capital	-	-	-
<i>Accruals to cash adjustment</i>	-	-	-
Net cash requirement	1,124	1,157	1,191

Note that the grant-in-aid is shown under the 'Non-budget' shoulder-heading in the Estimate, since this is simply a financing transaction and it is the actual purchase of the assets by the NDPB that scores in budgets. Also, the grant in aid scores as current expenditure against the department's net resource requirement even if it finances capital expenditure by the NDPB.



Case studies (7): PCs and trading funds

This section considers a fictitious case study relating to the treatment of trading funds and most public corporations (PCs). The exceptions are self financing public corporations and PCs that borrow from the National Loans Fund.

Case study 7.1

7.1: Return on capital

A trading fund sponsored by the Department of Trade and Industry (DTI) has a net asset base of £30m in its 2002-03 accounts. The forecast projection is for net assets to grow by 3% per year in the near future giving, for the SR2004 period, a prospective net asset base of:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net assets	30.9	31.83	32.78

Trading funds are required to make a return on capital employed, which may be higher than the government's standard rate. Assume in this case study that it is 8% of net assets. This is therefore the cost of capital charge on the DTI for the trading fund in the department's resource budget, Estimates and accounts. The DTI recoups this cost of capital through the receipt of interest and dividends from the trading fund.

Included in the trading fund's net assets is cash of £9m arising from previous profits. It is now working up a long term business plan for future investment, which will involve spending this capital equally over the three years of the 2004 Spending Review.

Questions:

What should the DTI be planning in terms of the required rate of return for the trading fund in SR2004? How would this be reflected in its DEL bids? What would be the implications for DTI's Estimates and accounts?

What would happen to DEL if the rise in the asset base was 4% per year?

What would happen if the level of dividend received by the DTI fell below the cost of capital charge by £1m in 2004-05 as a result of a bad year's trading?

What is the impact of the trading fund investing its spare cash?

What would be the position if the trading fund was in receipt of a loan via the DTI over the same period and was liable to pay interest of £1m a year?

Solution

This case study shows how the budgeting regime for trading funds and most public corporations is based on the transactions in the accounts.

If the DTI plans on the basis that it will receive dividends equivalent to the cost of capital charge, other things being equal, the impact on DEL should be zero because both will score in DEL.

Case studies (7): PCs and trading funds



The following table illustrates this:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Trading fund's net assets	30.9	31.83	32.78
DTI Resource DEL			
• Cost of capital*	2.47	2.55	2.62
• Dividends	-2.47	-2.55	-2.62
Total	-	-	-

* 8% of net assets

The DTI's Estimates and accounts would show the cost of capital charge as well as transactions between it and the trading fund – ie the dividends in this example (which would generally be included in the Estimates as appropriations in aid):

Estimates	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement			
• Cost of capital charge*	2.47	2.55	2.62
• Dividends	-2.47	-2.55	-2.62
Total	-	-	-
Capital	-	-	-
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	-2.47	-2.55	-2.62
Net cash requirement**	-2.47	-2.55	-2.62

* This is the cost of capital charge on the investment in the department's balance sheet in respect of the trading fund, applying the required rate of return to the trading fund's underlying net assets.

** A department could not actually have a negative net cash requirement – the transactions shown here would simply reduce the overall net cash requirement. Otherwise, if there were no other cash requirement, the cash would need to be surrendered in the resource to cash reconciliation table as 'Excess cash to be CFERed'.

Accounts	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Operating cost statement			
• Cost of capital	2.47	2.55	2.62
• Dividends	-2.47	-2.55	-2.62
Net operating cost	-	-	-
Balance sheet movements	-	-	-



Case studies (7): PCs and trading funds

If the asset base grows at 4% over the period, the effect is the same, provided dividends also rise:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Trading fund's net assets	31.2	32.45	33.75
DTI Resource DEL			
• Cost of capital*	2.50	2.60	2.70
• Dividends	-2.50	-2.60	-2.70
Total	-	-	-

* 8% of net assets

If, however, the level of dividend fell short by £1m in 2004-05, there would be a £1m hit on DTI's resource DEL in that year:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Trading fund's net assets	31.2	32.45	33.75
DTI Resource DEL			
• Cost of capital*	2.50	2.60	2.70
• Dividends	-2.50	-1.60	-2.70
Total	-	1.00	-

* 8% of net assets

This would be reflected in DTI's Estimates and accounts as follows:

<i>Estimates</i>	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement			
• Cost of capital charge*	2.50	2.60	2.70
• Dividends	-2.50	-1.60	-2.70
Total	-	1.0	-
Capital	-	-	-
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	-2.50	-2.60	-2.70
Net cash requirement**	-2.50	-1.60	-2.70

* This is the cost of capital charge on the investment in the department's balance sheet in respect of the trading fund.

** As noted earlier, this would reduce the overall net cash requirement.

Case studies (7): PCs and trading funds



Accounts	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Operating cost statement			
• Cost of capital*	2.50	2.60	2.70
• Dividends	-2.50	-1.60	-2.70
Net operating cost	-	1.00	-
Balance sheet movements	-	-	-

A trading fund's self financed capital expenditure is outside DEL, so its investment plans have no direct effect on the department's budget. However, if the dividend payable out of current profits fell short, the DTI could ask the trading fund to meet the difference from the cash represented by its previous profits, thus curtailing the investment. Or it could decide to absorb the hit.

Either way, it would be a matter for the department.

Also, the capital expenditure would still have to be recorded as it scores in Total Managed Expenditure and public sector net investment.

If the trading fund was in receipt of a loan via the DTI over the same period and was liable to pay interest of £1m a year, the cost of capital charge which the DTI has to bear in relation to its Public Dividend Capital (PDC) holdings in, and loan to, the trading fund is still 8% of the net assets, but in this case it is offset by a combination of dividend and interest received:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Trading fund's net assets	30.9	31.83	32.75
DTI Resource DEL			
• Cost of capital*	2.47	2.55	2.62
• Interest received	-1.00	-1.00	-1.00
• Dividends	-1.47	-1.55	-1.62
Total	-	-	-

* 8% of net assets, here assumed to grow by 3% a year

This would be reflected in DTI's Estimates and accounts as follows (the interest and dividends would generally be included in the Estimates as appropriations in aid):



Case studies (7): PCs and trading funds

<i>Estimates</i>	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement			
• Cost of capital charge	2.47	2.55	2.62
• Interest	-1.00	-1.00	-1.00
• Dividends	-1.47	-1.55	-1.62
Total	-	-	-
Capital	-	-	-
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	-2.47	-2.55	-2.62
Net cash requirement*	-2.47	-2.55	-2.62

* As noted earlier, this would reduce the overall net cash requirement.

<i>Accounts</i>	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Operating cost statement			
• Cost of capital	2.47	2.55	2.62
• Interest received	-1.00	-1.00	-1.00
• Dividends	-1.47	-1.55	-1.62
Net operating cost	-	-	-
Balance sheet movements	-	-	-



Case studies (8): investments

This section examines a fictitious case study relating to the impact of changes in the valuation of a department's investments.

Case study 8.1

8.1: Valuation of investments

In return for the Department for International Development's (DFID) contributions and subscriptions to international financial institutions (IFIs), DFID is allocated a share holding in each IFI. But, unlike shares traded on the stock exchange, it does not receive a dividend, nor can it sell the shares.

The benefits that DFID receives from having the shareholding are not in cash, but in terms of influencing development objectives. DFID's interest in each IFI is treated as an investment, and is thus shown as an asset in the resource account.

The valuation of the investment in IFIs is based on DFID's share of the net assets of each IFI. DFID's share is set out in international agreements. Net assets are shown in the accounts of each IFI.

DFID has a 10% share of the International Bank for Reconstruction and Development (IBRD). Assume that the value of DFID's investment at 31/3/2004 is £782m, based on IBRD's net assets of \$11,730m; and that this is unchanged from the previous year. At 31/12/2004, IBRD publishes its annual accounts for the previous 12 months. DFID's share of net assets has risen to £875m.

DFID has a 15% share of the European Bank for Reconstruction and Development (EBRD). Assume that the value of this investment at 31/3/2004 is £261m, based on EBRD's net assets of €2,610m; and that this is unchanged from the previous year. At 31/12/2004, EBRD publishes its accounts for the previous 12 months. DFID's share of EBRD's net assets has fallen to £205m. This reduction in value reflects a trend going back many years.

Question:

What is the budgetary impact of the change in the value of each investment over the period 2003-04 to 2005-06, assuming that no other changes in value occur?

Solution

This case study illustrates how to reflect increases and decreases in investments in budgets, Estimates and accounts, and how changes affect the cost of capital charge. Increases are taken up by the revaluation reserve and decreases are treated as an impairment if there is no buffer in the revaluation reserve and if there is a permanent diminution in value.

Under the resource budgeting framework, a department's resource DEL reflects the operating cost statement (OCS). Increases in the value of investments do not directly affect the OCS but will build up a revaluation reserve in the balance sheet. This is what happens in the IBRD case.



Case studies (8): investments

There is a secondary effect resulting from the change in this asset's valuation. The cost of capital charge is calculated on the basis of a department's net assets and appears in the department's OCS and resource DEL. As a result of the revaluation, the department's net assets have changed and therefore so will the cost of capital charge.

The value of the IBRD investment will increase by £93m. This is shown in DFID's balance sheet for 2004-05.

The cost of capital charge for 2003-04 is based on its average value of net assets:

$$£782\text{m} \times 3.5\% = £27.4\text{m}$$

The cost of capital charge for 2004-05 is based on the average value of the investment. For 9 months this was £782m and for 3 months £875m. The average is thus:

$$\begin{aligned} \frac{(9 \times 782) + (3 \times 875)}{12} &= £805.2\text{m} \\ \times 3.5\% &= £28.2\text{m} \end{aligned}$$

For 2005-06, the valuation is £875m. The cost of capital charge at 3.5% is thus £30.6m.

The impact on the resource DEL/OCS is shown in the following table:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL/OCS			
• Change in value of investment	-	-	-
• Cost of capital charge	27.4	28.2	30.6
Total	27.4	28.2	30.6
Capital DEL	-	-	-

Cost of capital charge is a non-cash cost and, while affecting resources in the Estimate for each of the years, has no impact on the amount of cash required by the department. There is no change to capital. Thus the impact on DFID's Estimates in 2003-04, 2004-05 and 2005-06 is as follows:



Case studies (8): investments

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement	27.4	28.2	30.6
Capital	-	-	-
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	-27.4	-28.2	-30.6
Net cash requirement	-	-	-

Reductions in value, such as in the EBRD case, are treated differently.

If there is no revaluation reserve balance for that investment and the reduction in value is perceived to be permanent, the reduction is an impairment. It is treated as a loss and thus shown in the operating cost statement and therefore impacts on the resource DEL.

The only exception would be if the reduction in value were due to market fluctuations that were expected to be reversed. As the value of the EBRD investment has been decreasing for some years, it is likely that the value will not be reversed and that there will not be a revaluation reserve.

For EBRD, the cost of capital charge for 2003-04 is based on the average value of net assets:

$$£261m \times 3.5\% = £9.1m$$

The impairment in the value of the investment in EBRD in 2004-05 is (£261m – £205m) = £56m.

The cost of capital charge for 2004-05 is based on the average value of the investment. For 9 months this was £261m and for 3 months £205m.

The average is thus:

$$\frac{(9 \times 261) + (3 \times 205)}{12} = £247m$$
$$\times 3.5\% = £8.6m$$

For 2005-06, the valuation is £205m. The cost of capital charge at 3.5% is therefore £7.2m.



Case studies (8): investments

The impact on resource DEL/OCS is as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL/OCS			
• Impairment in value of investment		56	
• Cost of capital charge	9.1	8.6	7.2
Total	9.1	64.6	7.2
Capital DEL	-	-	-

Impairment and cost of capital charge are non-cash costs and, while affecting resources, have no impact on the amount of cash required by DFID. There is no change to voted capital spending. Impairments are shown in the Estimate against depreciation. Thus the impact on DFID's Estimates in 2003-04, 2004-05 and 2005-06 is as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement	9.1	64.6	7.2
Capital	-	-	-
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	-9.1	-8.6	-7.2
• <i>Depreciation</i>		-56.0	
Net cash requirement	-	-	-



Case studies (9): loans

This section considers a fictitious case study relating to the repayment, write off and interest received on loans made by departments.

Case study 9.1

9.1: Loans

The UK's contributions to international financial institutions (IFIs), together with those of other countries, allow the IFIs to make loans, which in turn help fulfil development objectives. DFID also provides loans to governments and aid organisations on a bilateral basis.

On 1 April 2003, DFID has long-term loans outstanding (assets) of £1,335m on its balance sheet. Repayments of £32m are received in each of 2003-04, 2004-05 and 2005-06. In 2003-04, interest of £6m is receivable and all of it is received. In 2004-05, interest of £6m is receivable but only £5m is received. During 2005-06, Ministers decide for policy reasons to write-off the interest not received together with the related loan of £20m. In 2005-06, interest due of £5m is received.

Questions:

What is the impact on DFID's budgets, Estimates and accounts of:

- the loan repayments
- the interest received
- the write-off

(For the purpose of this case study, ignore the impact on the cost of capital charge.)

Solution

This case study highlights the treatment in budgets, Estimates and accounts of loans, repayments and interest on loans. Loans have both capital budgetary effects (net lending) and resource consequences (the cost of capital charge and bad debts).

The loans are assets of DFID and thus would have scored in capital DEL. Repayments of these loans (£32m) should be treated in the same way - ie they will not be income in the operating cost statement. Repayments score in the Estimate either as non-operating cost Appropriations in Aid (AinA) or, if there is no related spending in the Estimate, as Consolidated Fund Extra Receipts (CFERs). The cash receipts are taken into account in determining the net cash requirement

Interest is treated differently. This is the financial return on DFID's investment; thus, it is income in the OCS (ie resource DEL). All of the interest due is shown in resource DEL even when not all of it is received.

Thus, in 2004-05, income of £6m is shown; the increase in the amount owed to DFID (£1m) is reflected in the resource to cash reconciliation, leaving an impact on the net cash requirement of -£5m, being the cash received.



Case studies (9): loans

The loans written off are similar to the impairment of an asset. The amount written off the loan is charged to the OCS/ resource DEL in 2005-06; the net cash requirement is not affected because no cash is received and thus the resource position must be adjusted in the resource to cash reconciliation. DFID's Balance Sheet reflects the repayments of the loans over the three years, together with the write off of a loan and related interest.

Thus the treatment in DFID's budgets, Estimates and accounts in 2003-04, 2004-05 and 2005-06 is as follows:

Budgets	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL			
• Interest	-6	-6	-5
• Loan write off			20
• Interest write off			1
Total	-6	-6	16
Capital DEL	-32	-32	-32

Estimates	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement	-6	-6	16
Capital	-32	-32	-32
<i>Accruals to cash adjustment</i>			
• Impairment			-20.0
• Write off of bad debt			-1.0
• Increase(+)/decrease(-) in debtors		1.0	
Net cash requirement	-38	-37	-37

Accounts	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Operating cost statement	-6	-6	16
Balance sheet			
• Loan repayments	-32	-32	-32
• Debtors		1	-1
• Loan write off			-20
Total	-32	-31	-53

Case studies (10): PFI



This section examines two fictitious case studies relating to PFI deals. The first case study involves off balance sheet treatment of PFI deals; the second, on balance sheet treatment of PFI deals.

Case study 10.1

10.1: PFI, finance leases and barter deals – off balance sheet

At the start of 2004-05, HM Customs and Excise (HMCE) enters into a PFI type deal whereby it leases all of its land and buildings to a private company. The terms of the deal are such that the impact is similar to selling the properties – the properties will be off-balance sheet. In return, the company pays £270m, being the market value of the properties. The value of the properties on the department's balance sheet is £310m.

The department leases-back the properties for an annual charge of £6m. The terms of the lease are such that the lease-back does not bring the properties back on to the department's balance sheet.

Questions:

What is the impact on budgets, Estimates and accounts? Specifically:

What is the impact on resource DEL, capital DEL and net cash requirement of the lease to the private company? What happens to the depreciation charge and cost of capital charge?

What are the implications of the proceeds being lower than the value in the accounts? Does this mean that the deal is poor value for money?

What is the impact on resource DEL and net cash requirement of the lease-back? Should HMCE establish a provision?

What is the impact on budgets, Estimates and accounts if the company pays only £155m but in return charges the department a reduced rent of £3m pa over the term of the lease (the open market value of the property is £270m)? How much should the department score to resource DEL for the rental of the properties?

(It is not necessary to consider the impact in 2003-04 as this was before the PFI deal started.)

Solution

In this case study, the budgeting, Estimates and accounts treatment of off balance sheet PFI is covered. Depreciation and cost of capital charge are not paid by the department as it no longer owns the asset and instead the rent scores in resource DEL.

The budgetary, Estimates and accounting impacts are similar. The book value of the properties is written out of the balance sheet and scores as negative capital DEL. As the amount of cash received is less than the value recorded in HMCE's balance sheet, the difference (the loss on sale) is shown as an expense in the operating cost statement (resource DEL).



Case studies (10): PFI

The annual rent paid by HMCE scores in resource DEL. No provision should be set up for future lease payments.

As HMCE does not hold the properties as assets, there is no cost of capital charge or depreciation charge.

The overall budgetary impact is:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL			
• Depreciation	3		
• Capital charge	11		
• Maintenance of buildings	5		
• Loss on sale		40	
• Rental		6	6
Total	19	46	6
Capital DEL			
• NBV of disposed assets		-310	

Note: The figures for 2003-04 in this and the following tables illustrate what the position might have been before the sale and demonstrate the changes that a PFI can make. They cannot be derived from the information included in this case study.

The loss on sale does not necessarily indicate poor value for money. Value for money should take account of all of the factors in the deal, including transfer of risk. There are clear benefits in that the department will no longer have to pay maintenance costs. It also avoids the risk that these will be higher than envisaged.

The table above shows the sale proceeds lower than the value on the balance sheet as a loss on the sale. But this need not always be the case. For instance, if the lower value reflects a slump in the property market following years in which values have increased, it is possible to revalue the assets prior to the disposal and therefore reflect the loss in the revaluation reserve rather than in resource DEL.

In these circumstances, the impact on the capital DEL is unchanged. But no loss is reflected in the department's resource DEL. However, if the balance in the revaluation reserve is not sufficient to absorb the downward valuation, the excess must in most cases be taken to resource DEL.

Thus, there are often judgements to be made and the budgetary and accounting treatment can be different. Also, unlike this case, it is not always clear cut that assets are either on or off balance sheet.



Case studies (10): PFI

In 2003-04, depreciation (£3m) and cost of capital charge (£11m) are non-cash costs and, while affecting resources, have no impact on the amount of cash required by the department. However, the maintenance (£5m) scores in both resources and cash.

The terms of the PFI deal are such that the impact is similar to selling the properties – ie off balance sheet. In this case, the total of the book value (£310m) minus the loss (£40m) scores as a £270m capital receipt (non-operating appropriation in aid) in 2004-05.

The loss on sale (£40m) is a non-cash cost affecting resources only. The inclusion of the loss is necessary both to get to the correct figure for non-operating appropriations in aid and to reflect its treatment as (non-cash) spending in the OCS. The double counting of the loss elements in both the resource and capital sides of the Estimate are removed as an accruals to cash adjustment in the Part II: Resource to cash reconciliation table. The annual charge (£6m) scores in both resources and cash for 2004-05 and 2005-06.

Thus the impact on HMCE's Estimates in 2003-04, 2004-05 and 2005-06 is as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net resource requirement	19	46	6
Capital			
• Non-operating AinA		-270	
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	-11		
• <i>Depreciation</i>	-3		
• <i>Profit/loss on sale of assets</i>		-40	
Net cash requirement	5	-264	6

If the company pays only £155m but in return charges the department a reduced rent of £3m a year over the term of the lease, the department should take into account the separate elements of the barter deal and not just the cash payments. The annual rental charge scored in resource DEL should be what it would have been without the barter, ie £6m not £3m.

The department has received only £155m instead of the £270m it would have received on the open market. In effect, it has paid £115m (£270m - £155m) for the reductions in rental over the period of the lease. This is similar to a prepayment of rent and an asset should be set up in the department's balance sheet. This is unwound at a rate of £3m a year which, together with the amount paid in cash annually (£3m), gives the market rental of £6m.

The impact of the sale of the asset is no different.



Case studies (10): PFI

The overall budgetary impact is:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL			
• Depreciation	3		
• Capital charge	11	4	4
• Maintenance of buildings	5		
• Loss on sale		40	
• Rental – cash		3	3
• Rental – prepayment		3	3
Total	19	50	10
Capital DEL			
• NBV of disposed assets		-310	

The overall Estimates impact is:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net Resource Requirement	19	50	10
Capital			
• Non operating AinA		-270	
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge</i>	-11	-4	-4
• <i>Depreciation</i>	-3		
• <i>Profit/loss on sale of assets</i>		-40	
• <i>Increase(+)/Decrease(-) in debtors</i>		112	-3
Net cash requirement	5	-152	3



Case studies (10): PFI

Case study 10:2

10:2: PFI – on balance sheet

A PFI contract to supply IT services to a department from a purpose-built IT facility commences on 1 April 2003. A review of the accounting treatment concludes that although the IT facility is legally owned by the PFI Operator, in substance it is an asset of the department and therefore the PFI contract is *on balance sheet*.

The PFI contract is for 3 years and the annual payment under the contract is £364m, payable in equal monthly instalments. The estimated value of the IT facility is £810m and its estimated useful life is 3 years, with no residual value at the end of its life. The value of the service element of the contract is £50m a year.

Question:

What is the budgetary impact over the 3 year period of the PFI contract being accounted for as on balance sheet rather than off balance sheet?

Solution

This case study covers the consequences of on balance sheet PFI deals on the budget. Resource DEL scores the finance charge, depreciation, a capital charge and an amount for the services supplied.

If the PFI contract were off balance sheet it would be accounted for as the purchase of IT services. There would be no impact on capital DEL and the £364m payable each year would score in resource DEL. Assuming no payments were outstanding at the year end, this would also be the annual net cash requirement.

However, as the PFI contract is on balance sheet, it must be accounted for as a finance lease - ie the acquisition of a fixed asset by means of an arrangement that is in substance borrowing. The asset is brought into the department's balance sheet at its estimated cost of £810m, along with a liability to the PFI Operator to pay for it of the same amount.

For both resource accounting and resource budgeting purposes, the monthly payments to the PFI Operator are regarded as comprising two elements: a finance lease rental and a payment for the service element of the PFI contract.

Since the service element of the annual contract payment is £50m, the finance lease rental element is £314m (£364m – £50m). So, over the three years of the contract, total finance lease rental payments are £942m (3 x £314m).

As the initial liability to the PFI Operator is £810m, £132m (£942m - £810m) of the finance lease rental is a finance charge equivalent to interest. Under a finance lease, the finance charge accrues at a constant interest rate on the outstanding liability.

So, as the liability reduces, the finance charge (interest) is paid on a smaller sum and so in turn reduces, and therefore the amount which goes towards reducing the finance lease liability increases.



Case studies (10): PFI

The split of the finance lease payments over the three years is:

	Finance charge element (£m)	Element paying off finance lease liability (£m)	Total annual payment (£m)	Liability outstanding at year end (£m)
2003-04	65	249	314	810 – 249 = 561
2004-05	44	270	314	561 – 270 = 291
2005-06	23	291	314	291 – 291 = Nil
Total	132	810	942	n/a

Since the IT facility has a useful life of three years, it would be depreciated over this period. The annual depreciation charge is £270m (£810m/ 3).

A capital charge is payable on the IT facility asset and there will also be a capital charge credit on the finance lease liability. The charge is payable on the average balances for the year as follows:

	Average balance (£m)	Capital charge at 3.5% (£m)	Average balance (£m)	Capital charge credit at 3.5% (£m)	Net capital charge for year (£m)
	IT FACILITY ASSET		FINANCE LEASE LIABILITY		
2003-04	$(810+540) / 2 =$ 675	23.6	$(810+561) / 2 =$ 686	-24.0	-0.4
2004-05	$(540+270) / 2 =$ 405	14.2	$(561+291) / 2 =$ 426	-14.9	-0.7
2005-06	$(270+0) / 2 =$ 135	4.7	$(291+0) / 2 =$ 146	-5.1	-0.4

Case studies (10): PFI



The overall budgetary impact is summarised below:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Resource DEL			
• Depreciation	270	270	270
• Capital charge on asset	23.6	14.2	4.7
• Capital charge credit on liability	-24	-14.9	-5.1
• Finance charge	65	44	23
• Service charge	50	50	50
Total	384.6	363.3	342.6
Capital DEL			
• Finance lease asset acquired	810		

The impact on Estimates is as follows:

	2003-04 (£m)	2004-05 (£m)	2005-06 (£m)
Net Resource Requirement	384.6	363.3	342.6
Capital	810		
<i>Accruals to cash adjustment</i>			
• <i>Cost of capital charge/credit</i>	<i>0.4</i>	<i>0.7</i>	<i>0.4</i>
• <i>Depreciation</i>	<i>-270</i>	<i>-270</i>	<i>-270</i>
• <i>Increase(-)/Decrease(+) in creditors</i>	<i>-561</i>	<i>270</i>	<i>291</i>
Net cash requirement	364	364	364



Case studies (11): joint ventures

This section considers a fictitious case study relating to the accounting treatment for joint ventures.

Case study 11.1

11.1: Joint ventures

An NDPB owns a 50% equity stake in a joint venture company. The results of the joint venture are as follows:

	2004-05 (£m)	2003-04 (£m)
Income and expenditure account		
Profit	10	
Dividend	<u>-6</u>	
Retained profit	4	
Balance sheet		
Fixed assets	200	180
Current assets	50	46
Current liabilities	<u>-100</u>	<u>-100</u>
Net assets	<u>150</u>	<u>126</u>
Share capital	100	
Revaluation reserve		
B/f	10	
Revaluation in year	<u>20</u>	
C/f		30
I&E reserve		
B/f	16	
Retained profit	<u>4</u>	
C/f		20
Shareholder funds	150	

Questions:

How will this be treated in the accounts of the NDPB, assuming the NDPB does not prepare consolidated accounts?

What will be the impact on the resource DEL and capital DEL of the sponsoring department?



Case studies (11): joint ventures

Solution

This case study covers the impact on the budget of a joint venture. This scores in a similar way to a trading fund or public corporation – the impact depending on the department's stake in the joint venture.

Where the investor does not prepare consolidated accounts – ie it does not own any subsidiary undertakings – the joint venture (JV) will be accounted for in the following way:

In the **Income and expenditure account**:

- the investor will account for dividends receivable from the JV;
- the investor will account for any decrease in the valuation of the investment, provided this is not the reversal of an increase in valuation previously recognised through the revaluation reserve
- the investor will incur a capital charge at 3.5% on its share of the net assets of the JV.

In the **Balance sheet**:

- the investor will account for its share of the JV's net assets as a fixed asset investment.

Note that where the investor prepares consolidated accounts – ie it owns subsidiary undertakings – the JV will be accounted for differently. The investor will account for its share of the JV's profit or loss, its share of the JV's other recognised gains and losses – eg revaluation adjustments – and its share of the JV's net assets as a fixed asset investment. This case study does not deal with this accounting treatment.

Where a joint venture is classified as a public corporation, the budgeting treatment is as follows:

Resource DEL will score:

- a cost of capital charge on equity stakes and loans to the public corporation (calculated on the average net assets of the public corporation);
- (less) interest and dividends paid by the public corporation to the department;
- all grants (including capital grants) and subsidies from the department to the public corporation;
- any decrease in the valuation of the investment charged to the operating cost statement.



Case studies (11): joint ventures

Capital DEL will score:

- all injections and net lending to the public corporation.

Note that self financing public corporations will score as above, but in AME.

In the light of the above, the accounting and budgeting treatment of this profit making joint venture would be as follows:

	2004-05	2003-04
NDPB: Income & expenditure account		
Dividend receivable from joint venture	3	
Write down of investment	-	
Cost of capital = $(63+75)/2 @ 3.5\%$	-2.4	
Retained profit	0.6	
Balance sheet		
Investment in joint venture	75	63
Capital DEL		
Equity injections	-	
Resource DEL		
Cost of capital = $(63+75)/2 @ 3.5\%$	2.4	
Dividend receivable from joint venture	-3	
Write down of investment	-	
Total	-0.6	

Note that the revaluation of the investment is the NDPB's share of the upward revaluation of the JV's fixed assets ($20/2 = 10$) plus the NDPB's share of the retained profit (ie profit not distributed) of the JV ($4/2 = 2$).

There would be no impact on the Estimate of the NDPB's sponsor department, since all transactions take place outside the departmental accounting boundary.



Annex A: key accounting concepts

Key accounting concepts used in the case studies, which were referred to on page 5, are explained below.

Accruals

An accrual relates to expenses that have been incurred (eg the good or service has been received) but no invoice has been received and the payment has not been made. Each expenditure should be recognised in the year in which the good or service has been received. A liability to pay the amount in the next year should be included in the balance sheet. With end-year flexibility mechanisms in place, there is no incentive for departments to move expenses from one year to the next by not recognising accruals.

Assets

Assets are generally items acquired by a department which are used for more than one year to assist in the delivery of its services. The same recognition rules apply as for expenses, ie the asset is accounted for when it is acquired, not when it is paid for. Common classifications of assets are tangible fixed assets (vehicles, land, buildings, IT equipment, finance leases) and current assets (cash, debtors, stock). There are also intangible fixed assets (patents, trademarks) and financial assets (investments, loans). Stocks of petrol count as current assets. So do bullets.

Tangible fixed assets are initially recorded at cost, reflecting the expenditure that has been capitalised. They are then valued at the lower of replacement cost and recoverable amount. They are depreciated over their useful lives. For new assets, it is very important to factor in the associated resource cost such as depreciation and other asset related costs such as maintenance and the capital charge.

Capitalisation

Costs that are directly attributable to the acquisition or enhancement of a fixed asset – ie an item that has a value to the department lasting more than a year – are capitalised. Departments have to determine the monetary threshold for treating what would normally be considered capital expenditure as an expense (resource expenditure). Some departments may set this at £1,000, others at £20,000. Some items below the threshold may be capitalised. For example, whereas the purchase of a single computer for £900 may be treated as an expense, the purchase of 100 computers for £90,000 would be treated as creating an asset.

It is important to be aware of the threshold, so that purchases planned by a department can be appropriately classified as an expense or as an asset (capital). There may be important implications for government budgeting if a department changes its threshold. For example, increasing the threshold may move capital into expenses (resource). In the absence of identifying offsetting cost reductions or receiving additional spending approval, this may adversely affect the amount which the department is able to spend on delivering its services. Departments should consult the Treasury and the NAO if they want to make significant changes to their capitalisation threshold.

Contingent liabilities

Contingent liabilities are liabilities that are not included in the balance sheet because there is uncertainty about the likelihood of actually having to pay them. Contingent liabilities must, however, be itemised in the notes to the accounts.

Departments should monitor their contingent liabilities carefully. Large contingent liabilities that become more certain, and therefore become actual liabilities, can be significant in financial terms. Departments need strategies in place to manage these amounts so that meeting any of the costs arising does not significantly reduce their ability to provide services.



Annex A: key accounting concepts

Cost of capital charge

The Government as a whole incurs an interest cost for borrowing to finance investments by departments. This is also described as the Government's cost of capital. To improve transparency and to ensure the full cost of services is reflected in departmental accounts, departments incur a "capital charge" representing this borrowing cost. In general terms, the capital charge is calculated as a percentage of the department's net assets (assets less liabilities), although some assets are excluded from the charge (eg donated assets).

The cost of capital charge – 3.5% in SR2004 – is a non-cash cost. In other words, departments do not have to make a cash payment, but it is a cost in their budgets, Estimates and resource accounts. The charge is apportioned between administration and programme costs in the operating cost statement (OCS), in the same proportion as assets are deployed by the department in delivering administration or programmes.

In SR2004, as in SR2002, departments will bear the risk associated with changes in the cost of capital charge (in SR2000, it was ring-fenced outside departments' budgets). This acts as an incentive to departments to manage their net asset position through divesting themselves of surplus assets (thereby reducing the cost of capital charge) and managing their working capital (eg paying creditors on time rather than early, and getting debtors to pay promptly, will reduce the charge).

Depreciation

Depreciation is a non-cash cost representing the allocation of the cost or value of a fixed asset over its useful life. Different assets have different useful lives. For example, buildings may be depreciated over 50 years, whilst computer equipment generally has a useful life of less than 5 years, due to rapid technological change.

The public sector usually uses "straight-line" depreciation - ie if an item lasts 3 years, one third of the cost (less any residual value at the end of the 3 years) would be depreciated each year. However, aircraft may have useful lives based on flying hours.

Departments are required to disclose in their resource accounts the useful life of each category of fixed assets. Changes to asset useful lives or depreciation rates have the potential to shift costs across years and change the profile of acquisitions. Departments should consult the Treasury and the NAO if they want to make significant changes.

Gains and losses on disposal

Gains or losses on disposal represent the difference between the proceeds from the sale of a fixed asset and its net book value (its value in the balance sheet) when it is sold. So a gain/loss on the sale of a fixed asset which is recognised in a department's OCS in one period usually reflects either an accounting policy which has resulted in over/under depreciation charged to its OCS in previous periods or unexpected price movements.

Joint ventures

A joint venture is a venture in which the reporting entity holds an interest on a long term basis and is jointly controlled by the reporting entity and one or more other venturers under a contractual arrangement.

An entity jointly controls a venture with one or more other entities if none of the entities alone can control the venture, but all together can do so and decisions on financial and operating policy essential to the activities, economic performance and financial position of that venture require the consent of each entity.



Annex A: key accounting concepts

Liabilities

Liabilities are generally amounts owed by the department. There are current liabilities (creditors due within 1 year) and non-current liabilities (amounts falling due after more than 1 year). Liabilities include provisions.

Operating leases and finance leases

Under present arrangements, operating leases are treated as an expense and finance leases as an asset. To determine which applies in a particular case, there are various tests to determine who has the risks and rewards of ownership of an asset.

Where significant projects involve lease or buy decisions, a project evaluation is needed. Guidance is available in the Treasury's "Green Book" <http://cabserver/PSD-PSDA/PSDA%20Team%20Page/GreenBookWIP/Green%20BookWIP.htm>. Since the cost to government of borrowing to invest in assets is generally much lower than the cost of capital accessible to businesses providing operating leases, it is important to understand the types of options for leasing available and the full costs and benefits to the department.

PFI contracts

An analysis of the risks associated with a PFI contract will be carried out to determine the level of risk transfer. If sufficient risk has been transferred to the private sector, the contract is treated as "off balance sheet". If sufficient risk remains with the public sector, the contract is "on balance sheet".

For off balance sheet treatment:

- there is no impact on the balance sheet unless the contract involves the sale of an asset, in which case this will be removed from the balance sheet;
- the rental charge under the contract is charged to the OCS over the terms of the lease: profit or loss on the sale of an asset is also charged to the OCS.

For on balance sheet treatment:

- the initial amount recorded on the balance sheet as a fixed asset and as a liability should be the fair value of the property: the liability is reduced as payments for the property are made;
- the asset should be depreciated over its useful economic life and an imputed finance charge on the liability should be recorded on the OCS. A cost of capital charge at the Government's standard rate, calculated as a percentage of the average net book value of the fixed asset over the year, is also a charge to the OCS. A cost of capital credit will also be recorded on the liability, but will fall outside DEL in SR2004.

Where PFI contracts involve payments for assets and services, the payments for the assets will be treated as above, with the remainder of the PFI payments (ie the full payments, less the capital repayment and the imputed financing charge) recorded as an operating cost.

Prepayments

Prepayments are amounts paid in advance of when the service is delivered. For example, the Ministry of Defence may pay an annual retainer fee upfront to a contractor to be on call to supply additional equipment at short notice (if required). The portion of the payment that is prepaid is not an expense in the current period – instead, it is treated as an asset in the current period. Prior to the introduction of end-year flexibility (EYF), departments had an incentive to pre-pay expenses from the current year's budget. This should no longer apply.



Annex A: key accounting concepts

Provisions

A provision is an actual liability of uncertain timing or amount. Examples include provisions for negligence (significant for the Department of Health); early retirement commitments; and compensation for injury (significant for MOD). Provisions are a cost that increases expenses (resource cost) in the current year. As provisions are liabilities, they reduce the department's cost of capital charge.

There will often be an element of judgement involved in establishing the correct amount to include as a provision, and so provisions represent a significant area of risk for a department's management of its budget position.

Revaluation reserve

The revaluation reserve is part of taxpayer's equity (the department's net assets) shown on the balance sheet. The revaluation reserve shows the accumulated and unrealised amount of revaluations of fixed assets and stock.

Revaluations and impairments

Fixed assets, stocks and investments are required to be revalued annually. This has implications for the department in terms of depreciation and cost of capital charge. Upwards revaluations are not treated as "income" and do not offset current year expenses. Some downward revaluations may be treated as an expense.

If an asset is considered impaired because it is no longer delivering its service potential, this means that there is a permanent reduction in its value. The amount written off from the value of an asset is an expense in the current year.

If not budgeted for, downward revaluations that are treated as an expense, and also impairments, reduce the amount of resources departments have available to spend on service delivery.

Statement of Recognised Gains and Losses

The Statement of Recognised Gains and Losses (SRGL) sets out the changes in the revaluation reserve and any prior year adjustments to opening balances in the balance sheet. The SRGL is included in Schedule 2 of departmental resource accounts with the OCS. Items recognised in the SRGL fall outside departmental budgets.

Stocks

Stocks include consumable stores, goods or other assets purchased for use or resale by a department in the provision of its services. Stocks are recorded on the balance sheet and are revalued when the effect is material.

Annex B: Estimates, budgets and accounts



This Annex provides a brief explanation of the links between Supply Estimates, resource accounts and resource budgets.

Supply Estimates

Supply Estimates are requests by the Treasury to the House of Commons for approval for most departmental spending. The Estimates, which are prepared on an accruals basis, summarise both the resources and the cash required by departments in a particular year.

Resource accounts

Resource accounts are prepared annually and present the financial results of a department for the relevant financial year. They are presented in a format which is consistent with that of Supply Estimates, and are prepared on the basis of generally accepted accounting practice (GAAP) and in accordance with the Resource Accounting Manual.

Resource budgets

Resource budgeting uses accruals based principles in order to plan and control public spending. Although, generally, resource budgeting is based on the information contained in resource accounts, in practice budgets, accounts and Estimates serve different functions. Therefore, there are some key differences in their coverage, resulting in different treatment of a number of transactions.

The resource budgeting framework is designed to ensure that the level of total public expenditure is affordable, whilst setting the right management objectives. Thus, of necessity, its boundary is wider than the accounting and Estimates boundary. It includes, for example, the resources used by non-departmental public bodies (NDPBs), whereas the boundary for accounts and Estimates focuses on the department.

Role of budgets, Estimates and accounts

The roles of budgets, Estimates and accounts can be summarised as follows:

- Budgets are set by the Treasury for each department within the Government's framework for expenditure control. Departmental Expenditure Limits (DELs) are set in biennial Spending Reviews for three years in advance. DELs are administrative limits imposed by the Government on departments and sponsored bodies. They restrict the amount of expenditure for both capital investment and resource spending within the budget that departments and other bodies may make.

Budgeting aggregates do not in themselves convey cash. Budgeting is done at the public sector level.

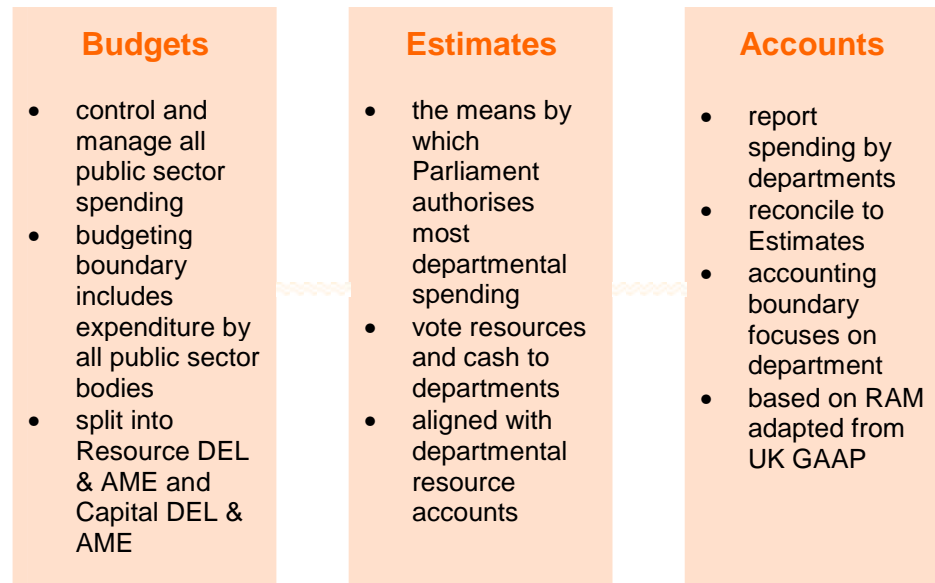
- Estimates are the means by which Parliament authorises most departmental spending. In particular, in the annual Main Estimates, Parliament:
 - > votes resources to departments for their own expenditure and for grants made to bodies beyond the accounting boundary;
 - > votes the overall cash consequences of Estimates; and
 - > approves the areas of spending on which the resources and cash may be used (as set out in the Ambit in Part I of the Estimate).



Annex B: Estimates, budgets and accounts

- Accounts report how departments have used the resources at their disposal during the financial year to which the accounts relate, including other bodies within the accounting boundary. The accounts are audited by the National Audit Office, who report their findings to Parliament. The underlying rules for departmental resource accounts are set out in the Resource Accounting Manual, which is based on generally accepted accounting practice in the UK (UK GAAP).

Links between Estimates, budgets and accounts



It follows that there will be different numbers in budgets, Estimates and accounts. For instance, not all spending in DEL is voted in Estimates: in 2003-04 around 70 per cent of DEL is voted, but 30 per cent is not. An example of non-voted DEL is actual NDPB expenditure (rather than the grant-in-aid which is voted), including self-funded capital expenditure by museums generating income from trading or via donations.

Scoring spending in Estimates, budgets and accounts

Most expenditure scores in the same way in budgets, Estimates and accounts. For example, cash current grants to the private sector given by the department, the department's accruals expenditure on pay, current procurement and new capital investment all score in the same way in the three aggregates. However, although the boundaries of budgets, Estimates and accounts have increasingly been aligned, differences remain because of their different roles. Expenditure relating to bodies that are inside the budgeting boundary, but outside the Estimates and accounting boundary, necessarily scores differently.

NDPB expenditure illustrates this. In accounts and Estimates, where the NDPB is outside the boundary, the grant in aid from the department to the NDPB scores; but in the budget, where the NDPB is inside the boundary, its full resource consumption scores.

Reconciliation between budgets, Estimates and accounts

Budgets, Estimates and accounts are consistent in that they use the same dataset, and departments must be able to reconcile between them. The following two tables show how resource expenditure is reconciled between Estimates, accounts and budgets, and how capital expenditure is reconciled between Estimates and budgets.



Reconciliation of resource expenditure

Net Resource Outturn (Estimates)

Remove

- Prior period adjustments

Additionally include

- Non-voted expenditure in the operating costs statement (OCS)
- Consolidated Fund Extra Receipts in the OCS

= Net Operating Costs (Accounts)

Remove

- Capital grants to local authorities
- Capital grants funded from the Capital Modernisation Fund (CMF)
- EU income and related adjustments
- Voted expenditure outside the budget

Additionally include

- Other CFERs relating to budget income – current
- Resource consumption of NDPBs
- Unallocated resource provision

= Resource Budget Outturn (Budget)

Of which

- Departmental Expenditure Limits (DELs)
- Annually Managed Expenditure (AME)

Reconciliation of capital expenditure

Net Voted Capital Outturn (Estimates)

Remove

- Gains/losses from sale of capital assets

Additionally include

- Other CFERs relating to budget income – capital
- Capital spending by NDPBs
- Capital grants to local authorities
- Capital grants financed by the CMF
- Local authority credit approvals
- Capital spending by levy funded bodies
- Unallocated capital provision

= Capital Budget Outturn (Budget)

Of which

- Departmental Expenditure Limits (DELs)
- Annually Managed Expenditure (AME)



Annex C: quick quiz answers

Suggested answers to the quick quiz on page 8 are as follows:

Quick quiz answers

1. Capital, since the fees are an integral part of acquiring the new asset.
2. Resource (expense), since this is a grant to a body outside the resource accounting boundary. Capital grants to local authorities however remain in capital DEL for SR2004.
3. Resource, as they do not result in the creation or development of a fixed asset.
4. Depends on the cost in relation to the department's asset recognition threshold. If the cost of the table is above the threshold, then it is treated as capital.
5. Capital, as it results in a change to an asset's life.
6. Neither. It is probably a contingent liability because:
 - there is uncertainty about whether a liability actually exists; and
 - there is uncertainty about the amount involved.

However, if it transpires that a quantifiable liability does exist, it would be treated as a provision and would therefore be a charge on the department's operating cost statement (OCS) as a resource cost.
7. An impairment or write down is charged to the OCS as a resource cost.
8. Resource, as this is effectively writing off a bad debt.
9. For trees, it depends on the cost in relation to the department's capital recognition threshold. For flowers, assuming they have a short life, they would be expensed as a resource cost.
10. Depends on whether it is a finance lease (capital) or an operating lease (resource).

Annex D: index of case studies



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Annex E: further information

“Managing Resources” booklets

Booklets in the “Managing Resources” series include the following (copies available from Denise Cooper, e-mail: Denise.Cooper@hm-treasury.gov.uk):



Implementing resource based financial management (the “New Blue Guide”) – September 2002



Analysing resource accounts: an introduction (the “Short Red Guide”) – June 2001



Case studies (the “Orange Guide”) SR2004 edition – February 2004



Analysing resource accounts: user's guide (the “Big Red Guide”) – June 2001



Reporting to the Board (the “Burgundy Guide”) – July 2002



Better decision taking in departments (the “Green Guide”) 3rd edition – October 2003



A strategic approach to finance training (the “Pink Guide”) – September 2001



Maximising the benefits for departments (the “Purple Guide”) – June 2001



Summary (the “Blue Leaflet”) – January 2002



Accountability (the “Chocolate Guide”) – July 2002



Faster closing (the “Mauve Guide”) – December 2002



Managing the links to Parliamentary Supply (the “Yellow Guide”) – October 2003

Other guidance

Further information on resource management issues is available on the Treasury's website at www.hm-treasury.gov.uk and is included in many published documents.

The *Resource Accounting Manual* is available at www.resource-accounting.gov.uk and *Government Accounting* is at www.government-accounting.gov.uk.

Public spending guidance is at www.knowledgenetwork.gsi.gov.uk/psg/psg.nsf, which contains summary guidance on a wide range of public spending issues, including Supply and budgets.

Information on Whole of Government Accounts is at www.wga.gov.uk.