

CHAPTER 19

Construction contracts

19.1 Introduction

The purpose of this chapter is to explain how IAS 11 *Construction Contracts* defines a construction contract and requires it to be recognised and measured in the financial statements. The chapter also considers the structure of public private partnerships that companies may enter into with government bodies, and considers the accounting issues and guidance that exists for contracts of this type.

Objectives

By the end of this chapter, you should be able to:

- identify when IAS 11 *Construction Contracts* is relevant;
- prepare the financial statements to reflect construction contracts appropriately;
- understand what public–private partnerships are and be able to understand how this type of arrangement is reflected in the financial statements.

19.2 The accounting issue for construction contracts

19.2.1 The future of revenue recognition

Accounting for construction and service contracts is a contentious area for the IASB and an area which is likely to see changes in the future as the IASB debates and revises its proposals on revenue recognition. Currently, IFRS has two approaches for recognising revenue: (i) an approach for goods which focuses on the point at which risks and rewards and control pass to the customer as being the basis for recognition, and (ii) an approach for service and construction contracts that recognises revenue over the period work is performed on a percentage completion basis. This percentage of completion approach is defined and explained in both IAS 11 and IAS 18 *Revenue* in its requirements for service contracts. In a discussion paper issued in December 2008 as a joint project with the FASB, the IASB has proposed a method of revenue recognition that attempts to define a principle that can be applied to all revenue for both goods and services and which therefore removes this dual approach. The basis proposed is that revenue basically should be recognised when the

contract obligations to the customer have been fulfilled and control of the good or service has been passed to the customer.

The revised approach proposed gives particular problems in its application to service and construction contracts. In the sale of goods it is generally clear when the obligation to the customer has been fulfilled, usually when the good has been delivered and accepted by the customer. However, for service and construction contracts the position is much less clear. For example, it might be argued that the obligations to the customer have only been fulfilled on completion of a contract, or alternatively it might be argued that they are fulfilled as the services are performed. In its discussion paper the IASB highlights that the fulfilment of an obligation to a customer only occurs if the customer has control of the asset that they are receiving. For example, the paper distinguishes between construction work undertaken on the developer's land and construction work undertaken on the customer's land. In the case of construction work undertaken on the developer's land until the development is passed to the customer it is more likely to be viewed as an asset of the developer and therefore the construction work is enhancing the developer's asset and not giving rise to revenue for the developer during the construction phase.

The uncertainty over how to apply the proposed revenue approach to service and construction contracts has caused concern. In its summary of the responses provided to the discussion paper, the IASB highlights that 'many respondents express concern with construction contracts because legal title to, or physical possession of, the *completed* asset might not be transferred until the end of the contract'. Hence, revenue would not be recognised until that point. It thinks that this is inappropriate because it considers many of their contracts to be contracts for construction services that are provided over the contract term. It is unclear as yet how these concerns will be addressed within any revised standard, however, it does appear clear that the IASB believes that an approach based on performance of obligations is appropriate and will be introduced.

19.2.2 IAS 11 Construction Contracts

IAS 11 *Construction Contracts* defines a construction contract as:

A contract specifically negotiated for the construction of an asset or a combination of assets that are closely inter-related or inter-dependent in terms of their design, technology and function or their ultimate purpose or use.

Some construction contracts are **fixed-price contracts**, where the contractor agrees to a fixed contract price, which in some cases is subject to cost escalation clauses. Other contracts are **cost-plus contracts**, where the contractor is reimbursed for allowable costs, plus a percentage of these costs or a fixed fee.

Construction contracts are normally assessed and accounted for individually. However, in certain circumstances construction contracts may be combined or segmented. Combination or segmentation is appropriate when:

- A group of contracts is negotiated as a single package and the contracts are performed together or in a continuous sequence (combination).
- Separate proposals have been submitted for each asset and the costs and revenues of each asset can be identified (segmentation).

A key accounting issue is when the revenues and costs (and therefore net income) under a construction contract should be recognised. There are two possible approaches:

- Only recognise net income when the contract is complete – the *completed contracts method*.
- Recognise a proportion of net income over the period of the contract – the *percentage of completion method*.

IAS 11 requires the latter approach, provided the overall contract result can be predicted with reasonable certainty.

19.3 Identification of contract revenue

Contract revenue should comprise:

- (a) The initial amount of revenue agreed in the contract; and
- (b) Variations in contract work, claims and incentive payments, to the extent that
 - (i) it is probable that they will result in revenue;
 - (ii) they are capable of being reliably measured.

Variations to the initially agreed contract price occur due to events such as:

- cost escalation clauses;
- claims for additional revenue by the contractor due to customer-caused delays or errors in specification or design;
- incentive payments where specified performance standards are met or exceeded.

However they occur, the basic criteria of probable receipt and measurability need to be satisfied before variations can be included as revenue.

19.4 Identification of contract costs

IAS 11 classifies costs that can be identified with contracts under three headings:

Costs that directly relate to the specific contract, such as:

- site labour;
- costs of materials;
- depreciation of plant and equipment used on the contract;
- costs of moving plant and materials to and from the contract site;
- costs of hiring plant and equipment;
- costs of design and technical assistance that are directly related to the contract;
- the estimated costs of rectification and guarantee work;
- claims from third parties.

Costs that are attributable to contract activity in general and can be allocated to specific contracts, such as:

- insurance;
- costs of design and technical assistance that are not directly related to a specific contract;
- construction overheads.

Costs of this nature need to be allocated on a systematic and rational basis, based on the normal level of construction activity.

Such other costs as are specifically chargeable to the customer under the terms of the contract. Examples of these would be general administration and development costs for which reimbursement is specified in the terms of the contract.

Contract costs normally include relevant costs from the date the contract is secured to the date the contract is finally completed. If they can be separately identified and reliably measured then costs that are incurred in securing the contract can also be included as part of contract costs if it is probable the contract will be awarded. However, where such costs were previously recognised as an expense in the period in which they were incurred then they are not included in contract costs when the contract is obtained in the subsequent period.

Care needs to be taken to ensure that non-contract costs are not attributed to a contract causing the profit for the year to be inflated. For example, the following is an extract from the Cray Inc 2005 Annual Report:

Cray has determined that certain costs were incorrectly charged to the product development contract in 2004; this contract is accounted for under the percentage of completion method. This restatement will decrease 2004 revenue by \$3.3 million, decrease cost of product revenue by \$3.1 million, increase research and development expense by \$3.1 million and increase net loss by \$3.3 million. There was no impact on cash or short-term investment position.

19.5 Recognition of contract revenue and expenses

IAS 11 states that the revenue and costs associated with a construction contract should be recognised in the statement of comprehensive income as soon as the outcome of the contract can be estimated reliably. This is likely to be possible when:

- the total contract revenue can be measured reliably and it is probable that the related economic benefits will flow to the enterprise;
- the total contract costs (both those incurred to date and those expected to be incurred in the future) can be measured reliably;
- the stage of completion of the contract can be accurately identified.

As stated in section 19.2 above, the method of accounting for construction contracts that is laid down in IAS 11 is the percentage of completion method, which, as we have seen, involves, *inter alia*, identifying the stage of completion of the contract. IAS 11 does not identify a single method that may be used to identify the stage of completion. For many contracts this may involve an external expert (e.g. an architect) confirming that the contract has reached a particular stage of completion. However, alternative methods that might be appropriate include:

- the proportion that contract costs incurred for work performed to date bear to total contract costs;
 - this is the method used, for example, by Johnson Matthey in its 2006 annual report:

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Where the outcome of a construction contract can be estimated reliably, revenue and costs are recognized by reference to the stage of completion. This is normally measured by the proportion that contract costs incurred to date bear to the estimated total contract costs.

- completion of a physical proportion of the contract work.

The appropriate method for recognising net income on a construction contract is to recognise the relevant proportion of total contract income as revenue and the relevant proportion of total contract costs as expenses. Clearly under this process the proportion of net income that is attributable to the work performed to date will be credited in the statement of comprehensive income.

If, exceptionally, the contract is expected to show a loss then the total expected loss is recognised immediately on the grounds of prudence. Where the contract is at too early a stage for an accurate prediction of the overall result then IAS 11 forbids enterprises from recognising any profit. In such circumstances, provided there is no reason to expect that the contract will make an overall loss, then the revenue that is recognised should be restricted to the costs incurred during the year that relate to the contract, which should in turn be recognised as an expense. Clearly in such circumstances the net income recognised is nil.

This is the policy stated in the 2006 Johnson Matthey annual report:

Where the outcome of a construction contract cannot be estimated reliably, contract revenue is recognised to the extent of contract costs incurred that it is probable will be recoverable. Contract costs are recognized as expenses in the period in which they are incurred.

The statement of financial position presentation for construction contracts should show as an asset – *Gross amounts due from customers* – the following net amount:

- total costs incurred to date;
- plus attributable profits (or less foreseeable losses);
- less any progress billings to the customer.

Where for any contract the above amount is negative, it should be shown as a liability – *Gross amounts due to customers*.

Advances – amounts received by the contractor before the related work is performed – should be shown as a liability – effectively a payment on account by the customer.

The financial statements of Eni, an Italian company that prepares financial statements in accordance with US GAAP, show an accounting policy note for inventories that is fairly close to the requirements of IAS 11:

Contract work-in-progress, representing 14% and 12% of inventories at December 31, 1998 and 1999 respectively, is recorded using the percentage-of-completion method.

Payments received in advance of construction are subtracted from inventories and any excess of such advances over the value of work performed is recorded as a liability.

Contract work-in-progress not invoiced, whose payment is agreed in a foreign currency, is recorded at current exchange rates at year-end. Future losses that exceed the revenues earned are accrued for when the company becomes aware such losses will occur.

This policy is IAS 11 compliant in all respects other than the treatment of advances. IAS 11 requires that these be shown as liabilities until the related work is performed.

19.5.1 IAS 11 Illustrated – Profitable Contract using – Step approach first year of contract

ABC has two construction contracts outstanding at the end of its financial year, 30 June 20X0. Details for Contract A are as follows:

	<i>Contract A</i>
	<i>£000</i>
Total contract price	25,000
Costs incurred to date	5,500
Anticipated future costs	14,500
Progress billings	—
Advance payments	
% complete 30.6.X0	28%

Step 1 Overall anticipated result

The first step is to predict the overall contract result using the information available at the period end date:

	<i>Contract A</i>
	<i>£000</i>
Total contract price	25,000
Total expected contract costs:	
Costs to date	(5,500)
Expected future costs	(14,500)
Overall anticipated result	<u>5,000</u>

Step 2 Statement of comprehensive income: revenue entry

The next step is to compute the revenue that will be included in the statement of comprehensive income for the year ended 30 June 20X0:

	<i>Contract A</i>
	<i>£000</i>
Cumulative revenue (28% of total)	7,000
So revenue for the year	7,000

Step 3 Statement of comprehensive income: expense entry

We now move on to compute the expense that will be recognised:

	<i>Contract A</i>
	<i>£000</i>
28% of total anticipated costs (use actual)	5,500
Allowance for future losses	<u>Nil</u>
So expense for the year	<u>5,500</u>

Before we move on to the presentation of the contracts, let us summarise the statement of comprehensive income position for the current year:

	<i>Contract A</i>
	<i>£000</i>
Revenue	7,000
Expense	<u>(5,500)</u>
Net income (expense)	<u>1,500</u>

Step 4 Statement of financial position entries

As far as this statement is concerned, the figures presented will be based on the cumulative amounts. The gross amounts due from customers will be as follows:

	<i>Contract A</i>
	<i>£000</i>
Costs incurred to date	5,500
<i>Add</i> : recognised profits less recognised losses	1,500
<i>Less</i> : progress billings	<u>—</u>
Gross amounts due from customers	<u>7,000</u>

Note: As no problems had been experienced or were anticipated the company decided that it was appropriate to treat on a percentage completion basis.

19.5.2 Example: Profitable contract – step approach for year 2

ABC has two construction contracts outstanding at the end of its financial year, 30 June 20X1. Details for Contract A are as follows:

	<i>Contract A</i>
	<i>£000</i>
Total contract price	25,000
Costs incurred to date	14,000
Anticipated future costs	6,000
Progress billings	12,000
Advance payments	4,000
% complete 30.6.X1	60%

Step 1 Overall anticipated result

The first step is to predict the overall contract result using the information available at the period end date (this is unchanged from the year 1 estimate):

	<i>Contract A</i>
	<i>£000</i>
Total contract price	25,000
Total expected contract costs:	
Costs to date	(14,000)
Expected future costs	<u>(6,000)</u>
Overall anticipated result	<u>5,000</u>

Step 2 Statement of comprehensive income: revenue entry

The next step is to compute the revenue that will be included in the statement of comprehensive income for the year ended 30 June 20X1:

	<i>Contract A</i>
	<i>£000</i>
Cumulative revenue (60% of total)	15,000
<i>Less</i> : recognised in previous years:	<u>(7,000)</u>
So revenue for the year	<u>8,000</u>

Step 3 Statement of comprehensive income: expense entry

We now move on to compute the expense that will be recognised:

	<i>Contract A</i>
	<i>£000</i>
60% of total anticipated costs	12,000
Allowance for future losses	Nil
<i>Less:</i> recognised in previous years	<u>(5,500)</u>
So expense for the year	<u>6,500</u>

Before we move on to the presentation of the contracts, let us summarise the statement of comprehensive income position, both for the current year and cumulatively:

	<i>Year 1</i>	<i>This year</i>	<i>Contract A Cumulative</i>
	<i>£000</i>	<i>£000</i>	<i>£000</i>
Revenue	7,000	8,000	15,000
Expense	<u>(5,500)</u>	<u>(6,500)</u>	<u>(12,000)</u>
Net income (expense)	<u>1,500</u>	<u>1,500</u>	<u>3,000</u>

Step 4 Statement of financial position entries

As far as this statement is concerned, the figures presented will be based on the cumulative amounts. The gross amounts due from customers will be as follows:

	<i>Contract A</i>
	<i>£000</i>
Costs incurred to date	14,000
<i>Add:</i> recognised profits less recognised losses	3,000
<i>Less:</i> progress billings	<u>(12,000)</u>
Gross amounts due from customers	<u>5,000</u>

19.5.3 Example: Loss making contract – step approach

ABC has two construction contracts outstanding at the end of its financial year, 30 June 20X1. Details for the second, Contract B, are as follows:

	<i>Contract B</i>
	<i>£000</i>
Total contract price	20,000
Costs incurred to date	15,000
Anticipated future costs	9,000
Progress billings	10,000
Advance payments	Nil
% complete 30.6.X1	50%
% complete 30.6.X0	Not possible to determine

Contract B was at an early stage of completion at 30 June 20X0 but there was no indication at that date that it was likely to make a loss. Costs incurred on Contract B to 30 June 20X0 totalled £2,000,000.

Step 1 Overall anticipated result

The first step is to predict the overall contract result using the information available at the period end date:

	<i>Contract B</i>
	<i>£000</i>
Total contract price	20,000
Total expected contract costs:	
Costs to date	(15,000)
Expected future costs	<u>(9,000)</u>
Overall anticipated result	<u>(4,000)</u>

Step 2 Statement of comprehensive income: revenue entry

The next step is to compute the revenue that will be included in the statement of comprehensive income for the year ended 30 June 20X1:

	<i>Contract B</i>
	<i>£000</i>
Cumulative revenue (50% of total)	10,000
<i>Less:</i> recognised in previous years	<u>(2,000)</u>
So revenue for the year	<u>8,000</u>

Notice that the revenue that is recognised in the year to 30 June 20X0 for contract B is equal to the costs incurred in that year. This is because, in previous years, the contract was at too early a stage to recognise any profit. Therefore, under IAS 11, the revenue and expense that is recognised is equal to the costs actually incurred on that contract.

Step 3 Statement of comprehensive income: expense entry

We now move on to compute the expense that will be recognised:

	<i>Contract B</i>
	<i>£000</i>
50% of total anticipated costs	12,000
Allowance for future losses	2,000
<i>Less:</i> recognised in previous years	<u>(2,000)</u>
So expense for the year	<u>12,000</u>

As far as contract B is concerned, recognising 50% of the total contract price and revenue and 50% of the total expected contract costs as expense results in a net expense of £2,000,000 [$£10,000,000 - £12,000,000$]. The contract is expected to make an overall loss of £4,000,000. Since the contract is expected to be loss-making then the whole of the expected loss must be recognised. This means making an additional charge to expense of £2,000,000 [$£4,000,000 - £2,000,000$].

Before we move on to the presentation of the contracts, let us summarise the statement of comprehensive income position, both for the current year and cumulatively:

	<i>Year 1</i>	<i>This year</i>	<i>Contract B</i> <i>Cumulative</i>
	<i>£000</i>	<i>£000</i>	<i>£000</i>
Revenue	2,000	8,000	10,000
Expense	<u>2,000</u>	<u>(12,000)</u>	<u>(14,000)</u>
Net income (expense)	<u>—</u>	<u>(4,000)</u>	<u>(4,000)</u>

Step 4 Statement of financial position entries

As far as this statement is concerned, the figures presented will be based on the cumulative amounts. The gross amounts due from customers will be as follows:

	<i>Contract B</i>
	<i>£,000</i>
Costs incurred to date	15,000
<i>Add:</i> recognised profits less recognised losses	(4,000)
<i>Less:</i> progress billings	<u>(10,000)</u>
Gross amounts due from customers	<u>1,000</u>

19.6 Public–private partnerships (PPPs)

PPPs have become a common government policy for public bodies to enter into contracts with private companies which have included contracts for the building and management of transport infrastructure, prisons, schools and hospitals. There are inherent risks in any project and the intention is that the government, through a PPP arrangement, should transfer some or all of such risks to private contractors. For this to work equitably there needs to be an incentive for the private contractors to be able to make a reasonable profit provided they are efficient whilst ensuring that the providers, users of the service, tax payers and employees also receive a fair share of the benefits of the PPP.

Improved public services

It has been recognised that where such contracts satisfy a value for money test it makes economic sense to transfer some or all of the risks to a private contractor. In this way it has been possible to deliver significantly improved public services with:

- increases in the quality and quantity of investment, e.g. by the private contractor raising equity and loan capital in the market rather than relying simply on government funding;
- tighter control of contracts during the construction stage to avoid cost and time overruns, e.g. completing construction contracts within budget and within agreed time – this is evidenced in a report from the National Audit Office¹ which indicates that the majority are completed on time and within budget; and
- more efficient management of the facilities after construction, e.g. maintaining the buildings, security, catering and cleaning of an approved standard for a specified number of years.

PPP defined

There is no clear definition of a PPP. It can take a number of forms, e.g. in the form of the improved use of existing public assets under the Wider Markets Initiative (WMI) or contracts for the construction of new infrastructure projects and services provided under a Private Finance Initiative (PFI).

The Wider Markets Initiative (WMI)²

The WMI encourages public sector bodies to become more entrepreneurial and to undertake commercial services based on the physical assets and knowledge assets (e.g. patents,

databases) they own in order to make the most effective use of public assets. WMI does not relate to the use of surplus assets – the intention would be to dispose of these. However, becoming more entrepreneurial leads to the need for collaboration with private enterprise with appropriate expertise.

Private Finance Initiative (PFI)

The PFI has been described³ as a form of public private partnership (PPP) that ‘differs from privatisation in that the public sector retains a substantial role in PFI projects, either as the main purchaser of services or as an essential enabler of the project . . . differs from contracting out in that the private sector provides the capital asset as well as the services . . . differs from other PPPs in that the private sector contractor also arranges finance for the project’.

In its 2004 Government Review the HM Treasury stated⁴ that:

The Private Finance Initiative is a small but important part of the Government’s strategy for delivering high quality public services. In assessing where PFI is appropriate, the Government’s approach is based on its commitment to efficiency, equity and accountability and on the Prime Minister’s principles of public sector reform. PFI is only used where it can meet these requirements and deliver clear value for money without sacrificing the terms and conditions of staff. Where these conditions are met, PFI delivers a number of important benefits. By requiring the private sector to put its own capital at risk and to deliver clear levels of service to the public over the long term, PFI helps to deliver high quality public services and ensure that public assets are delivered on time and to budget.

The following is an extract showing the capital value of PFI contracts and a breakdown by major departments.

<i>Department</i>	<i>Breakdown by department</i>	
	<i>Number of signed projects</i>	<i>Capital value (£m)</i>
Transport	45	21,432.1
Education and Skills	121	2,922.8
Health	136	4,901.2
Work & Pensions	11	1,341.0
Home Office	37	1,095.8
Defence	52	4,254.8
Scotland	84	2,249.3
Other departments	191	4,502.4
Total	677	42,699.4

The PFI has meant that more capital projects have been undertaken for a given level of public expenditure and public service capital projects have been brought on stream earlier. However, it has to be recognised that this increased level of activity must be paid for by higher public expenditure in the future, as the stream of payments to the private sector grows – PFI projects have committed the government (and future governments) to a stream of revenue payments to private sector contractors between 2000/01 and 2025/26 of more than £100 billion.

Briefly, then, PFI allows the public sector to enter into a contract (known as a concession) with the private sector to provide quality services on a long-term basis, typically twenty-five to thirty years, so as to take advantage of private sector management skills working under contracts where private finance is at risk.

19.6.1 How does PFI operate?

In principle, private sector companies accept the responsibility for the design; raise the finance; undertake the construction, maintenance and possibly operation of assets for the delivery of public services. In return for this the public sector pays for the project by making annual payments that cover all the costs plus a return on the investment through performance payments.

In practice the construction company and other parties such as the maintenance companies become shareholders in a project company set up specifically to tender for a concession. The project company:

- enters into the contract (the ‘concession’) with the public sector; then
- enters into two principal subcontracts with
 - a construction company to build the project assets; and
 - a facilities management company to maintain the asset – this is normally for a period of 5 or so years after which time it is re-negotiated.

NOTE: the project company will pass down to the constructor and maintenance subcontractors any penalties or income deductions that arise as a result of their mismanagement.

- raises a mixture of
 - equity and subordinated debt from the principal private promoters i.e. the construction company and the maintenance company; and
 - long-term debt.

NOTE: The long-term debt may be up to 90% of the finance required on the basis that it is cheaper to use debt rather than equity. The loan would typically be obtained from banks and would be without recourse to the shareholders of the project company. As there is no recourse to the shareholders, lenders need to be satisfied that there is a reliable income stream coming to the project company from the public sector, i.e. the lender needs to be confident that the project company can satisfy the contractual terms agreed with the public sector.

The subordinated debt made available to the project company by the promoters will be subordinated to the claims of the long-term lenders in that they will only be repaid after the long-term lenders.

- receives regular payments, usually over a twenty-five to thirty-year period, from the public sector once the construction has been completed to cover the interest, construction, operating and maintenance costs.

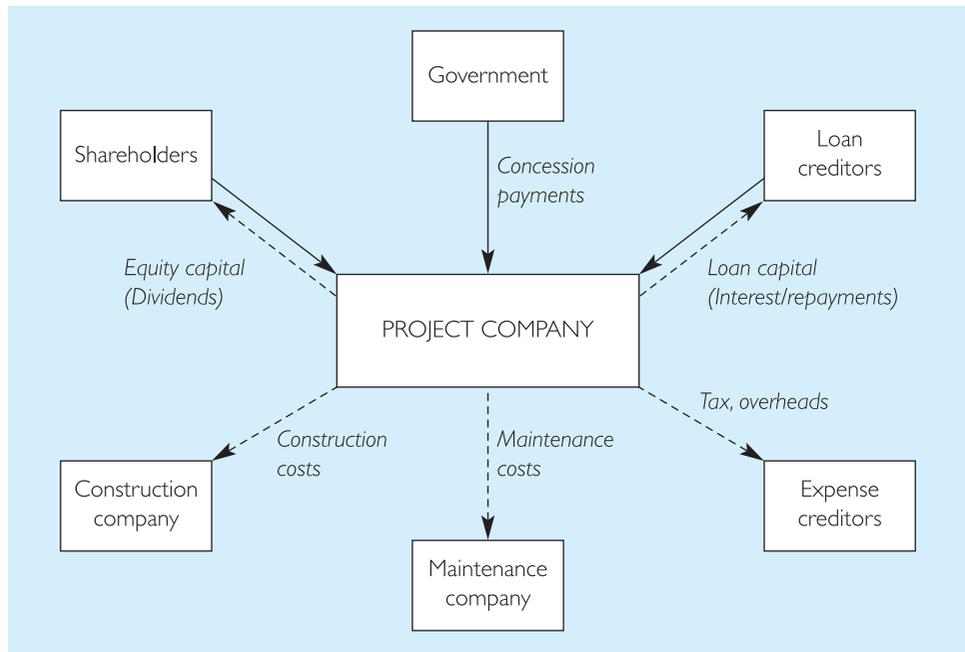
NOTE: Such payments may be conditional on a specified level of performance and the private sector partners need to have carried out detailed investigation of past practice for accommodation type projects and or detailed economic forecasting for throughput projects.

If, for example, it is an accommodation type project (e.g. prisons, hospitals and schools) then payment is subject to the buildings being available in an appropriate clean and decorated condition – if not, income deductions can result.

If it is a throughput project (e.g. roads, water) with payment made on basis of throughput such as number of vehicles and litres of water, then payment would be at a fixed rate per unit of throughput and the accuracy of the forecast usage has a significant impact on future income.

- makes interest and dividend payments to the principal promoters.
- returns the infrastructure assets in agreed condition to the public sector at the end of the twenty-five to thirty-year contractual period.

This can be shown graphically as in Figure 19.1.

Figure 19.1 The operation of PFI

19.6.2 Profit and cash flow profile for the shareholders

Over a typical thirty-year contract the profit and cash flow profiles would follow different growth patterns.

Profit profile

No profits received as dividends during construction. Before completion the depreciation and loan interest charges can result in losses in the early years. As the loans are reduced the interest charge falls and profits then grow steadily to the end of the concession.

Cash flow

As far as the shareholders are concerned, cash flow is negative in the early years with the introduction of equity finance and subordinated loans. Cash begins to flow in when receipts commence from the public sector and interest payments commence to be made on the subordinated loans, say from year 5, and dividend payments start to be made to the equity shareholders, say from year 15.

19.6.3 How is a concession dealt with in the annual accounts of a construction company?

Statement of comprehensive income entries

The accounting treatment will depend on the nature of the construction company's shareholding in the project company. If it has control, then it would consolidate. Frequently, however, it has significant influence without control and therefore accounts for

its investment in concessions by taking to the statement of comprehensive income its share of the net income or expense of each concession, in line with IAS 28 Investments in Associates.

19.6.4 How is a concession dealt with in the annual accounts of a concession or project company?

The accounting for service concessions has been a difficult problem for accounting standard setters around the world and different models exist. The main difficulties are in determining the nature of the asset that should be recognised, whether that is a tangible fixed asset, a financial asset or an intangible asset, or even some combination of these different options.

Accounting for concessions in the UK is governed by Financial Reporting Standard 5, Reporting the Substance of Transactions, Application Note F, which is primarily concerned with how to account for the costs of constructing new assets.

Assets constructed by the concession may be either considered as a fixed asset of the concession, or as a long-term financial asset ('contract receivable'), depending on the specific allocation of risks between the concession company and the public sector authority. In practice the main risk is normally the demand risk associated with the usage of the asset, e.g. number of vehicles using a road where the risk remains with the concession company.

Treated as a non-current asset

Where the concession company takes the greater share of the risks associated with the asset, the cost of constructing the asset is considered to be a fixed asset of the concession. The cost of construction is capitalised and depreciation is charged to the statement of comprehensive income over the life of the concession. Income is recognised as turnover in the statement of comprehensive income as it is earned.

Treated as a financial instrument

Where the public sector takes the greater share of the risks associated with the asset, the concession company accounts for the cost of constructing the asset as a long-term contract receivable, being a receivable from the public sector. Finance income on this contract receivable is recorded using a notional rate of return which is specific to the underlying asset, and included as part of non-operating financial income in the statement of comprehensive income.

Under the contract receivable treatment, the revenue received from the public sector is split. The element relating to the provision of services that are considered a separate transaction from the provision of the asset is recognised as turnover in the statement of comprehensive income. The element relating to the contract debtor is split between finance income and repayment of the outstanding principal.

The following is an extract from the Balfour Beatty 2003 Annual Report to illustrate a usage based concession:

Roads

Balfour Beatty's road concessions typically comprise a mixture of new build roads and taking responsibility for the long-term maintenance of roads that the concession has not constructed ('assumed roads').

The income on roads concessions is directly related to the volume of traffic. The new roads are therefore considered to be fixed assets of the concession and are depreciated over the life of the concession, once construction is complete.

The revenue is split into two streams: that relating to the constructed road and that relating to the assumed road. Revenue on the constructed road is recognised as turnover as it is received. Revenue on the assumed road is recognised as turnover as the underlying maintenance obligations are performed. Where revenue is received in advance of performing these obligations, its recognition as turnover is deferred until they are performed.

The total profit earned from a concession will be the same whether it is treated as a fixed asset or a finance asset. There will, however, be a difference in the timing of the profit recognition, and a difference in the presentation of income and expenses in the statement of comprehensive income. When treated as a fixed asset, profits increase over time largely due to the reducing financing costs of the transaction as the outstanding loans are repaid; when treated as a finance asset, the finance income is calculated on the full value of the contract debtor and this finance income falls in line with the principal repayments over the life of the project.

IFRIC 12 Service Concession Agreements

For enterprises preparing financial statements in accordance with IFRS, IFRIC 12 was issued in November 2006 and became effective for periods beginning on or after 31 January 2008. As we will see, this interpretation will result in accounting that has some similarities to that laid down for PFI contracts in UK FRS 5, however the presentation of the assets recognised might differ.

Service concession agreements are arrangements where a government or other body grants contracts for the supply of public services to private operators. IFRIC 12 draws a distinction between two types of service concession arrangement.

In one case the operator receives a **financial asset**, specifically an unconditional contractual right to receive cash or another financial asset in return for constructing or upgrading the public sector asset. In the other, an **intangible asset** – a right to charge for use of the public sector asset that it constructs or upgrades. IFRIC 12 allows for the possibility that both types of arrangement may exist within a single contract. Therefore, IFRIC 12 recognises two accounting models:

Under the **financial asset model** the operator receives a financial asset. This arises where the operator has an unconditional contractual right to receive cash or another financial asset from the public sector body for relevant services. This is where the public sector body contractually guarantees to pay the operator:

- specified or determinable amounts; or
- the shortfall, if any, between amounts received from users of the public service and specified or determinable amounts.

The operator measures the intangible asset initially at fair value. Subsequent to initial measurement the financial assets will be accounted for under IAS 39 and will be classified according to that standard. As a result the financial asset could be measured as follows:

- if classified as a ‘loan and receivable’ it will be measured at amortised cost;
- if classified as ‘available for sale’ it will be measured at fair value with gains and losses recognised in the other gains and losses section of the statement of comprehensive income; or
- if classified as ‘fair value through profit or loss’ it will be measured at fair value with gains and losses reflected with net profit or loss in the statement of comprehensive income.

Under the **intangible asset model** the operator recognises an intangible asset to the extent to which it receives a right to charge users of the public service. A right to charge users is not an unconditional right to receive cash because it depends on the extent to which the public uses the service.

The operator measures the financial asset initially at fair value. Subsequent to initial recognition the intangible asset will be recognised in accordance with IAS 38 *Intangible Assets*. Subsequent to initial recognition the assets amortisation or impairment charges will need to be recognised as required by IAS 38.

Revenue is recognised by the operator in accordance with the general recognition principles of IAS 11 and IAS 18.

Summary

Long-term contracts are those that cannot be completed within the current financial year. This means that a decision has to be made as to whether or not to include any profit before the contract is actually completed. The view taken by the standard setters is that contract revenue and costs should be recognised under IAS 11 using the percentage of completion method. There is a proviso that revenue and costs can only be recognised when the amounts are capable of independent verification and the contract has reached a reasonable stage of completion. Although profits are attributed to the financial periods in which the work is carried out, there is a requirement that any foreseeable losses should be recognised immediately in the statement of comprehensive income of the current financial period and not apportioned over the life of the contract.

REVIEW QUESTIONS

- 1 Discuss the point in a contract's life when it becomes appropriate to recognise profit and the feasibility of specifying a common point, e.g. when contract is 25% complete.
- 2 'Profit on a contract is not realised until completion of the contract.' Discuss.
- 3 'Profit on a contract that is not completed is an unrealised holding gain.' Discuss.
- 4 'There should be one specified method for calculating attributable profit.' Discuss.
- 5 The Treasury state that 'Talk of PFI liabilities with a present value of £110 million is wrong. Adding up PFI unitary payments and pretending they present a threat to the public finances is like adding up electricity, gas, cleaning and food bills for the next 30 years.' Discuss.

EXERCISES

An extract from the solution is provided on the Companion Website (www.pearsoned.co.uk/elliott-elliott) for exercises marked with an asterisk (*).

Question 1

MACTAR have a series of contracts to resurface sections of motorways. The scale of the contract means several years' work and each motorway section is regarded as a separate contract.

Required:

From the following information, calculate for each contract the amount of profit (or loss) you would show for the year and show how these contracts would appear in the statement of financial position with all appropriate notes.

<i>M1</i>	<i>£m</i>
Contract	3.0
Costs to date	2.1
Estimated cost to complete	0.3
Certified value of work completed to date	1.8
Progress billings applied for to date	1.75
Payment received to date	1.5
<i>M6</i>	<i>£m</i>
Contract sum	2.0
Costs to date	0.3
Estimated cost to complete	1.1
Certified value of work completed to date	0.1
Progress billings applied for to date	0.1
Payments received to date	—
<i>M62</i>	<i>£m</i>
Contract sum	2.5
Costs to date	2.3
Estimated costs to complete	0.8
Certified value of work completed to date	1.3
Progress billings applied for to date	1.0
Payments received to date	0.75

The M62 contract has had **major** difficulties due to difficult terrain, and the contract only allows for a 10% increase in contract sum for such events.

Question 2

At 31 October 20X0, Lytax Ltd was engaged in various contracts including five long-term contracts, details of which are given below:

	1	2	3	4	5
	£000	£000	£000	£000	£000
Contract price	1,100	950	1,400	1,300	1,200
<i>At 31 October</i>					
Cumulative costs incurred	664	535	810	640	1,070
Estimated further costs to completion	106	75	680	800	165
Estimated cost of post-completion guarantee rectification work	30	10	45	20	5
Cumulative costs incurred transferred to cost of sales	580	470	646	525	900
<i>Progress billings:</i>					
Cumulative receipts Invoiced	615	680	615	385	722
– awaiting receipt	60	40	25	200	34
– retained by customer	75	80	60	65	84

It is not expected that any customers will default on their payments.

Up to 31 October 20X9, the following amounts have been included in the revenue and cost of sales figures:

	1	2	3	4	5
	£000	£000	£000	£000	£000
Cumulative revenue	560	340	517	400	610
Cumulative costs incurred transferred to cost of sales	460	245	517	400	610
Foreseeable loss transferred to cost of sales	—	—	—	70	—

It is the accounting policy of Lytax Ltd to arrive at contract revenue by adjusting contract cost of sales (including foreseeable losses) by the amount of contract profit or loss to be regarded as recognised, separately for each contract.

Required:

Show how these items will appear in the statement of financial position of Lytax Ltd with all appropriate notes. Show all workings in tabular form.

*** Question 3**

During its financial year ended 30 June 20X7 Beavers, an engineering company, has worked on several contracts. Information relating to one of them is given below:

Contract X201

Date commenced	1 July 20X6
Original estimate of completion date	30 September 20X7
Contract price	£240,000
Proportion of work certified as satisfactorily completed (and invoiced) up to 30 June 20X7	£180,000
Progress payments from Dam Ltd	£150,000

Costs up to 30 June 20X7

Wages	£91,000
Materials sent to site	£36,000
Other contract costs	£18,000
Proportion of Head Office costs	£6,000
Plant and equipment transferred to the site (at book value on 1 July 20X6)	£9,000

The plant and equipment is expected to have a book value of about £1,000 when the contract is completed.

Inventory of materials at site 30 June 20X7	£3,000
<i>Expected additional costs to complete the contract:</i>	
Wages	£10,000
Materials (including stock at 30 June 20X7)	£12,000
Other (including Head Office costs)	£8,000

At 30 June 20X7 it is estimated that work to a cost value of £19,000 has been completed, but not included in the certifications.

If the contract is completed one month earlier than originally scheduled, an extra £10,000 will be paid to the contractors. At the end of June 20X7 there seemed to be a 'good chance' that this would happen.

Required:

- Show the account for the contract in the books of Beavers up to 30 June 20X7 (including any transfer to the statement of comprehensive income which you think is appropriate).
- Show the statement of financial position entries.
- Calculate the profit (or loss) to be recognised in the 20X6–X7 accounts.

Question 4

Newbild SA commenced work on the construction of a block of flats on 1 July 20X0.

During the period ended 31 March 20X1 contract expenditure was as follows:

	€
Materials issued from stores	13,407
Materials delivered direct to site	73,078
Wages	39,498
Administration expenses	3,742
Site expenses	4,693

On 31 March 20X1 there were outstanding amounts for wages 396 and site expenses 122, and the stock of materials on site amounted to 5,467.

The following information is also relevant:

- On 1 July 20X0 plant was purchased for exclusive use on site at a cost of 15,320. It was estimated that it would be used for two years after which it would have a residual value of 5,000.
- By 31 March 20X1 Newbild SA had received 114,580, being the amount of work certified by the architects up to 31 March 20X1 less a 15% retention.
- The total contract price is 780,000. The company estimates that additional costs to complete the project will be 490,000. From costing records it is estimated that the costs of rectification and guarantee work will be 2.5% of the contract price.

Required:

- Prepare the contract account for the period, together with a statement showing your calculation of the net income to be taken to the company's statement of comprehensive income on 31 March 20X1. Assume for the purpose of the question that the contract is sufficiently advanced to allow for the taking of profit.
- Give the values which you think should be included in the figures of revenue and cost of sales, in the statement of comprehensive income, and those to be included in net amounts due to or from the customer in the statement of financial position in respect of this contract.

*** Question 5**

Good Progress SpA entered into a contract on 1.1.20X0 at a contract price of 1,000,000 and an estimated total profit of 250,000. The contract was due for completion on 31.12.20X4.

The following information was available.

As at 31.12.20X0:

The contract was 25% complete and an architect's certificate was issued for 250,000.

As at 31.12.20X1:

The contract was 40% complete and an architect's certificate was issued for 400,000.

Required:

Prepare the statement of comprehensive income entries for the years ended 31 December 20X0 and 20X1 and the statement of financial position entries as at those dates.

Question 6

- (a) A concession company, WaterAway, has completed the construction of a wastewater plant. The plant will be transferred to the public sector unconditionally after 25 years. The public sector (the grantor) makes payments related to the volume of wastewater processed.

Discuss how this will be dealt with in the statement of comprehensive income and statement of financial position of the concession company.

- (b) A concession company, LearnAhead, has built a school and receives income from the public sector (the grantor) based on the availability of the school for teaching.

Discuss how this will be dealt with in the statement of comprehensive income and statement of financial position of the concession company, under IFRIC 12.

Question 7

Quickbuild Ltd entered into a two-year contract on 1 January 20X7 at a contract price of 250,000. The estimated cost of the contract was 150,000. At the end of the first year the following information was available:

- contract costs incurred totalled 70,000;
- inventories still unused at the contract site totalled 10,000;
- progress payments received totalled 60,000;
- other non-contract inventories totalled 185,000.

Required:

- (a) Calculate the statement of comprehensive income entries for the contract revenue and the contract costs.
- (b) Calculate entries in the statement of financial position for the amounts due from construction contracts and inventories.

Question 8

- (a) During 2006, Jack Matelot set up a company, JTM, to construct and refurbish marinas in various ports around Europe. The company's first accounting period ended on 31 October 2006 and during that period JTM won a contract to refurbish a small marina in St Malo, France. During the year ended 31 October 2007, the company won a further two contracts in Barcelona, Spain and Faro, Portugal. The following extract has been taken from the company's contract notes as at 31 October 2007:

<i>Contract:</i>	<i>Barcelona</i>	<i>Faro</i>	<i>St Malo</i>
	€m	€m	€m
Contract value	12.24	10.00	15.00
Work certified:			
To 31 October 2006	—	—	6.00
Year to 31 October 2007	<u>6.50</u>	<u>0.50</u>	<u>3.00</u>
To date	<u>6.50</u>	<u>0.50</u>	<u>9.00</u>
Payments received:			
To 31 October 2006	—	—	5.75
Year to 31 October 2007	<u>3.76</u>	<u>—</u>	<u>1.75</u>
To date	<u>3.76</u>	<u>—</u>	<u>7.50</u>
Invoices sent to client:			
To 31 October 2006	—	—	6.00
Year to 31 October 2007	<u>5.00</u>	<u>0.50</u>	<u>2.76</u>
To date	<u>5.00</u>	<u>0.50</u>	<u>8.76</u>
Costs incurred:			
To 31 October 2006	—	—	6.56
Year to 31 October 2007	<u>11.50</u>	<u>1.50</u>	<u>3.94</u>
To date	<u>11.50</u>	<u>1.50</u>	<u>10.50</u>
Estimated costs to complete:			
As at 31 October 2006			5.44
As at 31 October 2007	4.00	5.50	1.50

Notes

Barcelona:

Experiencing difficulties. Although JTM does not anticipate any cost increases, the client has offered to increase contract value by €0.76m as compensation.

Faro:

No problems.

St Malo:

Work has slowed down during 2007. However, company feels it can continue profitably.

The company uses the value of work certified to estimate the percentage completion of each contract.

Required

For each contract, calculate the profit or loss attributable to the year ended 31 October 2007 and show how it would be recognised in the company's balance sheet at that date. (Show your workings clearly.)

- (b) As JTM's 2007 accounts were being prepared, it became evident that the St Malo contract had slowed down due to a dispute with a neighbouring marina which claimed that the JTM refurbishment had damaged part of its quayside. The company has been told that the cost of repairing the damage would be €150,000. Jack Matelot believes it is a fair estimate and, in the interests of completing the contract on time, has decided to settle the claim. He is not unduly concerned about the amount involved as such eventualities are adequately covered by insurance.

Required

How should this event be dealt with in the 2007 accounts?

- (c) During 2007, Jack Matelot had two major worries: (i) the operating performance of JTM had not been as good as expected; and (ii) the planned disposal of surplus property (to finance the agreed acquisition of a competitor, MoriceMarinas, and the payment of a dividend) had not been successful. As a result of these circumstances, Jack had been warning shareholders not to expect a dividend for 2007. However, during November 2007, the property was unexpectedly disposed of for €5m; which enabled the payment of a 2007 dividend of €1m and the acquisition of MoriceMarinas for €4m.

Required

How should the above events be dealt with in the 2007 accounts?

(The Association of International Accountants)

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