

1 IAS 11 Construction Contracts



1.1 Definition of a construction contract

A **construction contract** is a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design technology and function or their ultimate purpose or use.

Accounting problem of construction contracts.

Construction contracts cause special problems as they are often of such a length that they span more than one accounting period.

Therefore, some prescribed method of recording revenue, cost of sales and profit over the life of the contract is needed.

Example 1

A company enters into a construction contract which runs for 12 months from 1 July, 20X7.

Total costs on the contract are expected to amount to Rs. 300,000 and the total contract price is Rs. 1,000,000. The company prepares accounts to 31 December each year.

Assume that no profit is recognized until the contract is complete. At 31 December 20X7, costs of Rs. 200,000 have been incurred.

Solution

If the costs of Rs. 200,000 are treated as work in progress (WIP) and included as an asset on the statement of financial position, this gives rise to a profit of Rs. Nil for the year ended 31 December, 20X7, but a profit of Rs. 700,000 for the year ended 31 December, 20X8.

Given that a large proportion of the work was carried out in 20X7, this treatment does not give a **fair presentation** of the activities of the company and is **contrary to the accruals concept**.

In addition, the nature of the assets and liabilities that arise during the contract period should be recognized. The assets will change in nature from inventories to receivables (gross amounts due from customers). This change results in detailed accounting procedures and disclosure requirements.

1.2 Types of construction contract

Fixed price contract

Fixed price contract is a construction contract in which contractors agrees to a fixed contract price, or a fixed rate per unit of output, which in some cases is subject to cost escalation clauses.

Cost-plus contract

Cost-plus contract is a construction contract in which the contractor is reimbursed for allowable or otherwise defined costs, plus a percentage of these costs or a fixed price. A contract may be a single contract like construction of a bridge or dam and can be a contract for a series of contracts, which are closely interrelated or interdependent in terms of design, technology or construction. Construction contracts include contracts for rendering of services and destruction / restoration of assets.

1.3 Combining and segmenting construction contracts

When a construction contract covers a number of assets, each asset will be treated as separate construction contract when:

- a) Separate proposals have been submitted for each asset;
- b) Each asset has been subject to separate negotiation and contractor and customer have been able to accept or reject that part of the contract relating to each asset; and
- c) The costs and revenues of each asset can be identified.

A group of contracts, whether with a single customer or with several costumers shall be treated as a single contract when:

- a) The group of contracts negotiated as a single contract;
- b) The contracts are so closely interrelated that they are in effect part of a single project with an overall profit margin; and
- c) The contracts are performed concurrently or in a continuous sequence.

A contract may include an additional asset at the option of the customer, the construction of additional asset shall be treated as a separate construction contract when:

- a) The asset differs significantly in design, technology or function from the asset or assets covered by the original contract; or
- b) The price of the asset is negotiated without regard to the original contract price.

2 Contract Revenue and Costs

2.1 Contract revenue

Contract revenue comprises:

- the initial amount of revenue agreed in the contract;
- variations in contract work and claims, to the extent that:
 - it is probable that they will result in revenue;
 - they are capable of being reliably measured.

Claims are amounts that the contractor seeks to reclaim from the customer as reimbursement for costs not included in the contract price. They may arise due to errors in design or customer caused delay.

- incentive payments (additional payments made to the contractor if performance standards are met or exceeded) when:
 - the contract is sufficiently advanced that it is probable that the specified performance standards will be met or exceeded; and
 - the amount of the incentive can be measured reliably.

Contract revenue is reduced by the amount of any penalties arising from delays caused by the contractor in the completion of the contract.

2.2 Contract costs

Contract costs comprise:

- costs that relate directly to the specific contract;
- costs that are attributable to contract activity in general and can be allocated to the contract;
- such other costs as are specifically chargeable to the customer under the terms of the contract.

Costs that relate directly to a specific contract include:

- site labour costs, including site supervision;
- costs of materials used in construction;
- depreciation of plant and equipment used on the contract;
- costs of moving plant, equipment and materials to and from the contract site;
- costs of hiring plant and equipment;

- costs of design and technical assistance that is directly related to the contract;
- the estimated costs of rectification and guarantee work, including expected warranty costs;
- claims from third parties.

The above stated costs will be reduced any incidental income such as from sale of surplus materials, wastes etc.,.

Examples of general costs are:

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

Examples of costs excluded from the contract costs are:

- a) general administrative and development costs for which reimbursement is not specified in the contract;
- b) selling costs;
- c) research and development costs for which reimbursement is not specified in the contract; and
- d) depreciation of idle plant and machinery that is not used on a particular contract.

3 Recognition of Contract Revenue and Expenses

- 3.1 Recognition depends upon whether the outcome of a contract can be measured reliably.

Where the outcome of a contract can be estimated reliably

If the expected outcome is a profit:

- revenue and costs should be recognized according to the stage of completion of the contract.

If the expected outcome is a loss:

- the whole loss to completion should be recognized immediately.

Reliable estimate of contract income

IAS 11 establishes the conditions to be met before it can be taken that the outcome

of a contract can be estimated reliably.

Fixed price contracts, i.e., those where the amount of revenue is known at the outset:

- total contract revenue can be measured reliably;
- it is probable that the economic benefits associated with the contract will flow to the entity;
- both the contract costs to complete the contract and the stage of contract completion at the reporting date can be measured reliably;
- the contract costs attributable to the contract can be clearly identified and measured reliably so that actual contract costs incurred can be compared with prior estimates.

Cost plus contracts, i.e., those where the basis for calculating revenue, but not the amount of revenue, is known at the outset:

- it is probable that the economic benefits associated with the contract will flow to the entity;
- the contract costs attributable to the contract, whether or not specifically reimbursable, can be clearly identified and measured reliably.

Where the outcome of a construction contract can not be estimated reliably

- revenue should be recognized only to the extent of contract costs incurred that it is probable will be recoverable;
- contract costs should be recognized as an expense in the period in which they are incurred.

Examples of circumstances when the recoverability of the contract may not be probable and contract costs to be recognized as expenses include the contracts: -

- a) which are not enforceable;
- b) the completion is subject to pending litigation;
- c) relating to properties that are likely to be condemned or expropriated;
- d) where the customer is unable to meet its obligation; or
- e) where the contractor is unable to meet its obligation under the contract.

Example 2

The following information relates to a construction contract:

Estimated contract revenue	Rs. 800,000
Costs to date	Rs. 320,000
Estimated costs to complete	Rs. 280,000
Estimated stage of completion	60%

- a) What amounts of revenue, costs and profit should be recognized in the income statement?
- b) Take the same contract but now assume that the business is not able to reliably estimate the outcome of the contract although it is believed that all costs incurred will be recoverable from the customer. What amounts should be recognized for revenue, costs and profit in the income statement?

Solution

a) Revenue (Rs. 800,000 × 60%)	Rs. 480,000
Costs ((320,000 + 280,000) × 60%)	<u>Rs. 360,000</u>
Profit	Rs. 120,000
a) Revenue (same as costs)	Rs. 320,000
Costs	<u>Rs. 320,000</u>
Profit	Nil

3.2 Recognition of expected losses

When it is probable that the contract cost will exceed total contract revenue, the expected loss should be recognized as an expense immediately.

The amount of loss will be recognized irrespective of the following: -

- a) whether the work has commenced on the contract;
- b) the stage of completion of the contract; and
- c) the amount of profits expected to arise on other contracts which are not treated as a single contract.

Summary of Recognition Rules



3.4 Changes in estimates

The percentage of completion method is applied on a cumulative basis in each accounting period to the current estimates of contract revenue and contract costs. Therefore, the effect of a change in the estimate of contract revenue or contract costs, or the effect of a change in the estimate of the outcome of a contract, is accounted for as a change in accounting estimate (see IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors) The changed estimates are used in the determination of the amount of revenue and expenses recognized in profit or loss in the period in which the change is made and in subsequent periods.

4 Presentation in Financial Statements

4.1 Statement of comprehensive Income

The following will appear in the statement of comprehensive income for construction contracts:

- revenue;
- costs;
- profit or loss.

Calculated according to the rules given above.

4.2 Statement of financial position

The following figures may appear in the statement of financial position:

- gross amount due from customers – asset;
- gross amount due to customers – liability.

The calculation (which may result in an asset or liability) is:

	Rs.
Costs incurred	X
Add: recognized profit	X
Less: recognized losses	(X)
Less: progress billings	(X)
Gross amounts due to / from customers	<u>X</u>

Asset and liability

Asset

The gross amount due from customers for contract work as an asset is the net amount of:

- costs incurred plus recognized profits; less
- the sum of recognized losses and progress billings.

for all contracts in progress for which costs incurred plus recognized profits (less recognized losses) exceeds progress billings.

The amount shown as an asset could thus include:

- progress billings not yet paid;
- contract costs relating to future activity (e.g., an inventory of goods on site not yet billed to the customer).

Liability

The gross amount due to customers for contract work as a liability is the net amount of:

- costs incurred plus recognized profits less;
- the sum of recognized losses and progress billing.

for all contracts in progress for which progress billings exceed costs incurred plus

recognized profits (less recognized losses).

Example 3

Ghayoor Builders build café bars. The projects generally take a number of months to complete. The company has three contracts in progress at the year ended 30 April.

	A Rs. '000'	B Rs. '000'	C Rs. '000'
Costs incurred to date	200	90	600
Costs to complete	200	110	200
Contract price	600	300	750
Progress billings	40	70	630

Ghayoor calculates the percentage of completion by using the costs incurred compared to the total costs.

Calculate the effects of the above contracts upon the financial statements.

Solution

Forecast profit

	A Rs. '000'	B Rs. '000'	C Rs. '000'
Revenue	600	300	750
Costs incurred	(200)	(90)	(600)
To completion	(200)	(110)	(200)
Gross profit / (loss)	200	100	(50)

Attributable profit (based on costs to date as a proportion of total costs).

Contract % complete calculated as: Profit / loss

**Costs incurred to date/
Total costs of project**

- | | | |
|----|------------------|---|
| a) | $200/400 = 50\%$ | $50\% \times \text{Rs. } 200,000 = \text{Rs. } 100,000$ |
| b) | $90/200 = 45\%$ | $45\% \times \text{Rs. } 100,000 = \text{Rs. } 45,000$ |
| c) | $600/800 = 75\%$ | Recognize loss in full, i.e., Rs. 50,00 |

	A Rs. '000'	B Rs. '000'	C Rs. '000'	Total Rs. '000'
Sales (balancing figure)	300	135	550	985
Costs	(200)	(90)	(600)	(890)
Gross profit	<u>100</u>	<u>45</u>	<u>(50)</u>	<u>95</u>

Statement of financial position

	A Rs. '000'	B Rs. '000'	C Rs. '000'
Costs incurred	200	90	600
Profits recognized	100	45	-
Loss recognized	-	-	(50)
Less: progress billings	(40)	(70)	(630)
Balance	<u>260</u>	<u>65</u>	<u>(80)</u>
Total asset (260 + 65)			Rs. 325,000
Total liability:			Rs. 80,000

5 Disclosures

5.1 The following disclosures to be made

- the amount of contract revenue recognized during the period;
- the method used to determine the contract revenue; and
- the method used to determine the stage of completion;

The following further disclosures to be made for each contract in progress: -

- the aggregate amount of costs incurred and recognized profits (less recognized losses to date);
- the amount of advances received; and
- the amount of retentions

An entity shall present: -

- the gross amount due from customers for contract 181/243 for all contracts where costs incurred plus profit recognized exceeds the progress billings (costs incurred to date plus recognized profit less the sum of recognized losses and progress billings);
- the gross amount due to customers for contract work as liability for all contracts where the progress billings exceeds costs incurred plus profit recognized (loss) (costs incurred to date plus recognized profit less the sum of recognized losses and progress billings).

 Self test Questions

- 1) Amjad House fits out shops. The projects generally take a number of months to complete. The company has three contracts in progress at the year ended 30 April:

	J Rs. '000'	K Rs. '000'	L Rs. '000'
Costs incurred to date	320	540	260
Costs to complete	40	90	120
Contract price	416	684	300
Work certified to date	312	456	200
Progress payments	250	350	230

Amjad accrues profit on its construction contracts using the percentage of completion derived from the sales earned as work certified compared to the total sales value.

Calculate the effects of the above contracts upon the financial statements.

- 2) 1 October, 20X6 Hanif Builders entered into a construction contract that was expected to take 27 months and therefore be completed on 31 December, 20X8. Details of the contract are:

	Rs. '000'
Agreed contract price	25,000
Estimated total cost of contract (excluding plant)	11,000

Plant for use on the contract was purchased on 1 January, 20X7 (three months into the contract as it was not required at the start) at a cost of Rs. 16 million. The plant has a four year life and after two years, when the contract is complete, it will be transferred to another contract at its carrying amount. Annual depreciation is calculated using the straight-line method (assuming a nil residual value) and charged to the contract on a monthly basis at 1/12 of the annual charge.

The correctly reported income statement results for the contract as at 31 March, 20X7 were:

	Rs. '000'
Revenue recognized	7,000
Contract expenses recognized	5,320
Profit recognized	<u>1,680</u>

182/243