5 Property, Plant and Equipment

5.1 Introduction

5.1.1 Objective

Fixed assets are usually a major portion of an enterprise's total assets and therefore are significant in relation to its financial position. In the past, AC 106 and AC 202 dealt specifically with the appropriate accounting treatment for fixed assets. However, in line with South Africa's harmonisation project which involves the adoption of International Accounting Standards, ED 90 was released in December 1993 with the ultimate intention of replacing AC 106 and AC 202.

ED 96 was issued as AC 123 in December 1994. AC 202 was withdrawn with the release of AC 123. However, AC 106 is still applicable to assets not defined as property, plant and equipment, for example intangible assets. According to AC 123 paragraph 8, investment properties may be treated as property in accordance with AC 123 or as long-term investments in accordance with a statement on accounting for investment properties. A statement on accounting for investment properties has not been issued to date and until such a statement comes into effect, investment properties may be accounted for as investment properties in accordance with AC 106 (refer section 5.8).

The remainder of this chapter considers the content of AC 123 and, in respect of investment properties, AC 106.

AC 123, closely based on IAS 16 (revised), adopts the international terminology of "property, plant and equipment" as opposed to the fairly loose term of fixed assets.

AC 123 is closely based on the framework (AC 000) and is concerned with three principal issues in accounting for property, plant and equipment. These issues are:

(a) the timing of recognition of items of property, plant and equipment;
(b) the determination of carrying amounts and related depreciation charges; and
(c) the determination and accounting treatment of impairments in the carrying amounts.
These are important criteria as an item of expenditure is either an asset or an expense and the classification thereof can have a significant effect on an enterprise's results. AC 123 requires an item of property, plant and equipment to be recognised as an asset when it satisfies the definition and recognition criteria for assets as set down in AC 000.

5.1.2 Definitions

AC 123 (paragraph 9) includes a number of definitions, the more important of which are:

**Property, plant and equipment** are tangible assets that:
- are held by an enterprise for use in the production or supply of goods or services, for rental to others or for administrative purposes; and
- are expected to be used during more than one period.

**Useful life** is either:
- the period of time over which an asset is expected to be used by the enterprise; or
- the number of production or similar units expected to be obtained from the asset by the enterprise.

**Cost** is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction.

**Fair value** is the amount for which an asset could be exchanged between knowledgeable willing parties in an arm's length transaction.

**Carrying amount** is the amount at which an asset is included in the balance sheet after deducting any accumulated depreciation thereon.

**Recoverable amount** is the amount that the enterprise expects to recover from the future use of an asset, including its residual value on disposal.

The distinguishing feature apparent from the above definitions between an item of property, plant and equipment and a current asset is that the former is expected to be used during more than one period, i.e. a current asset would be expected to be used or realised within the next accounting period. In addition, an important distinction, needs to made between carrying amount and recoverable amount. The carrying amount represents the net book value of property, plant and equipment at the balance sheet date whereas the recoverable amount is the expected future economic benefits
that the enterprise should recover from that asset. A decline in the recoverable amount, therefore, may require the carrying amount to be reduced to the level of expected economic benefits, i.e. the recoverable amount.

5.1.3 Exclusions

AC 123, unlike AC 106, does not deal specifically with investment properties but recognises that investment properties may be treated either as property in accordance with AC 123, or as long-term investments and therefore carried at cost or revalued amounts, without depreciation. Section 5.8 considers the appropriate accounting treatment, in terms of AC 106, of investment properties that are not depreciated.

AC 123 does not apply to forests and similar regenerative natural resources and mineral rights, the exploration for and extraction of minerals, oil, natural gas and similar non-regenerative resources.

Note that the principles of AC 123 apply equally to property, plant and equipment that has been acquired under a financial lease arrangement (see chapter 11).

5.2 Recognition Issues

5.2.1 Recognition of Property, Plant and Equipment

In keeping with AC 000, an item of expenditure is recognised as an asset when it satisfies the definition and recognition criteria of the framework. Therefore, in terms of paragraph 10 of AC 123, an "item of property, plant and equipment should be recognised as an asset when:

- it is probable that future economic benefits associated with the asset will flow to the enterprise, and
- the cost of the asset to the enterprise can be measured reliably."

The probability of future economic benefits is dependent on the degree of certainty attached to estimates of the expected flow of benefits at the time of the acquisition of the asset. Evidence of certainty is usually provided where there is assurance that the risks and rewards of ownership of the asset have passed, i.e. the enterprise will receive the rewards attaching to the asset and will undertake the associated risks.

In most cases, the reliable measurement of the cost of an item of property, plant and equipment is straightforward; i.e. usually invoiced cost exclusive of VAT. In certain circumstances, however, the reliable measurement of the cost of property, plant and equipment may be difficult:
5.2.2 Maintenance Spares

Most companies carry spare parts and servicing equipment as inventory items (i.e. current assets) and the expenditure is recognised as an expense when the spare part is used. Due to their nature, the spares do not normally meet the definition of property, plant and equipment. However, when an enterprise expects to use them during more than one accounting period or where they can be used only in connection with an item of property, plant and equipment and their use is expected to be irregular, then they are accounted for as fixed assets and depreciated over a time period not exceeding the useful life of a related asset.

5.2.3 Separate Components

In some circumstances, it is necessary to account separately for the various components of an asset. AC 123 gives the example of an airplane and its engines; the engines may have a different useful life to the airplane and care should be exercised in allocating the total cost of the airplane between the engines and the rest of the craft. The two components of the cost of the airplane are then depreciated over their respective useful lives.

5.2.4 Safety Equipment

Safety equipment and other equipment acquired to meet environmental regulations qualify for recognition as assets if the resulting carrying amount of the equipment and its related assets does not exceed the total recoverable amount from those assets.

5.3 Carrying Amount

5.3.1 Determining the Cost

Property, plant and equipment are initially measured at cost. The cost of an item of property, plant and equipment includes all expenses necessary in bringing it to its working condition or its intended use and may include:

- import duties
• non refundable purchase taxes
• site preparation costs
• delivery and handling costs
• installation costs, and
• professional fees (e.g. architects/engineers).

Trade discounts or rebates are excluded from the cost of property, plant and equipment while administrative and general overheads are not normally included in the cost of property, plant and equipment. In addition, start up and pre-production costs are only included in the cost of an asset if they are necessary to bring the item of property, plant and equipment to its working condition.

5.3.2 Construction of Property, Plant and Equipment

When property, plant and equipment are produced or constructed rather than purchased, then all directly attributable costs should be included in the production cost. The production cost should be determined in the same way as inventory (see chapter 4), i.e. abnormal wastage of materials or labour and internal profit is excluded from the production cost. Note that AC 114 allows financing costs to be included in the cost of a fixed asset that has been produced or constructed (see chapter 6).

5.3.3 Exchange Transactions

Assets are sometimes acquired through an exchange transaction; i.e. an item of property, plant and equipment is acquired in exchange for another item of property, plant and equipment. The appropriate accounting treatment depends on whether or not the exchange includes similar or dissimilar assets.

Where the exchange involves dissimilar assets, then the cost of such an asset is equivalent to the fair value of the asset given up, adjusted by the amount of any cash or cash equivalents transferred. In effect, the exchange is accounted for as though a disposal of the asset given up took place.

In the case of an exchange involving similar assets, then the cost of the new asset is the carrying amount of the asset given up unless the fair value of the asset received provides evidence of an impairment in the carrying amount of the asset given up. In this case, the asset given up should firstly be written down and then assigned to the new asset.
5.3.4 Improvements and Repairs

Where subsequent expenditure is incurred on existing property, plant and equipment, it is necessary to identify whether the expenditure will give rise to future economic benefits that are in excess of the originally assessed standard of performance of the existing items of property, plant and equipment (AC 123 paragraph 25). This test ensures that if the expenditure is an enhancement, then it is added to the carrying amount of the asset whereas if the expenditure is a repair then it is expensed.

The classification of an expenditure between a repair and an improvement is often subjective. AC 123 (paragraph 26) provides specific guidance about improvements by listing the following examples:

- modification of an item of plant to extend its useful life, including an increase in its capacity;
- upgrading machine parts to achieve a substantial improvement in the quality of output; and
- adoption of new production processes enabling a substantial reduction in previously assessed operating costs.

Expenditure on repairs and maintenance is usually expensed since it restores, rather than increases, the originally assessed standard of performance.

In certain circumstances, costs incurred subsequent to acquisition are capitalised because the purchase price reflected the enterprise's obligation to incur future expenditure. AC 123 (paragraph 28) gives an example of the acquisition of a building that requires renovation. In this case, the renovation costs are added to the carrying amount of the asset to the extent that they can be recovered from future use.

5.4 Depreciation

5.4.1 Economic Benefits Consumed

An item of property, plant and equipment is capitalised as an asset when its cost can be measured reliably and it is probable that future economic benefits associated with that asset will flow to the enterprise. It follows, therefore, that the carrying amount of the asset should be reduced to reflect the consumption of economic benefits embodied in the asset. This is achieved through a depreciation charge.

The amount of an item of property, plant and equipment that is subject to depreciation is known as the depreciable amount. This is the cost (or
valuation) of the asset less any estimated residual value. The depreciable amount should be allocated on a systematic basis over its useful life. This allocation should, as far as possible, match the consumption of economic benefits.

Economic benefits are consumed when an asset is used. In addition, obsolescence may result in a diminution of the originally estimated economic benefits. The following factors, therefore, need to be considered when assessing an asset's useful life:

- expected usage of the asset
- expected physical wear and tear of the asset
- technical obsolescence
- legal or other limits on the use of the asset.

The estimate of the useful life is a subjective exercise based on judgement. The useful life is not necessarily as long as an asset's economic life, i.e. the useful life is assessed in terms of the asset's expected utility to the enterprise. For example, a motor vehicle may be expected to have a five year useful life for an enterprise even though its economic life may be seven or more years. Useful lives should be reviewed regularly. The significant use by an enterprise of assets with a net total value of nil is often indicative of inappropriate depreciation policies, since the enterprise is not estimating useful lives properly.

It should be noted that depreciation arises from the consumption of economic benefits which bear a close relationship to the cost of an asset; i.e. depreciation is no more than the allocation of a historical cost to a period in which economic benefits are consumed. An increase in the value of an item of property, plant and equipment does not, therefore, negate the need for depreciation.

With the exception of land, which is usually assumed to have an indefinite useful life, all items of property, plant and equipment are depreciated. Although land and buildings are often combined by enterprises, AC 123 points out that land and buildings are separable assets and should be dealt with separately for accounting purposes. Buildings have a limited life and are therefore depreciable assets and an increase in the value of land on which a building stands should not affect the determination of the useful life of a building. (In certain circumstances, land and buildings may be treated as long term investments and not depreciated. Refer to section 5.8 for further discussion of investment properties.)
The revaluation of an asset (see section 5.5) does not eliminate the requirement that it should be depreciated, if it has a limited useful life.

Circumstances sometimes arise where the purchase of an asset results in the enterprise incurring dismantling, removal or restoration costs at the end of the asset’s useful life. In terms of AC 123, these costs are recognised as an expense over the life of the asset, either by reducing the anticipated residual value by the expected cost or by providing for the costs as a separate expense over the life of the asset.

5.4.2 Depreciation Method

As noted above, depreciation should be allocated on a systematic basis that matches the expected pattern of economic benefits. There are, therefore, a number of different methods of providing depreciation. AC 123 does not provide an exhaustive list of possible methods of depreciation but highlights the three more common methods, namely the straight line method, the diminishing (or reducing) balance method and the sum of the units (or unit of production) method. These three methods and the sum of the digits method are illustrated below:

(a) **Straight line.** This is the simplest and easiest method to apply. The cost, less residual value, is written off in equal parts over the asset’s life. For example, if an asset is purchased for R99 000 and is expected to last for six years with a residual value of R9 000 then the depreciable amount is R99 000 − R9 000 = R90 000, giving an annual depreciation charge of R15 000 (R90 000/6).

(b) **Diminishing balance.** This method, more commonly known in SA as reducing balance, is based on the argument that the total costs associated with an asset should be spread fairly over the asset’s life. In order to achieve this, less depreciation is charged in later years because a higher cost for repairs and maintenance usually arises in the later years. The method is usually applied by using a simple percentage that is multiplied by the current carrying amount of an asset. For example, an asset costing R90 000 is to be depreciated at 25% using the diminishing balance method. The depreciation in year 1 is R90 000 × 25% = R22 500. This leaves a carrying amount of R67 500 and the depreciation charge in the second year is R67 500 × 25% which equals R16 875. The process continues in a similar way each year. Notice that the carrying amount of the asset will never reach zero as the depreciation charge is a constant proportion of the carrying amount and becomes less and less each year.

(c) **Sum of the units.** This method ensures that the asset is written off in
line with its total estimated output. The formula applied is the original value of the asset multiplied by the value of the annual output divided by the total expected value of output from that asset. For example, if an asset is estimated to have an output of 100,000 units and in the first year the actual output is 15,000 then the depreciation percentage will be 15/100 i.e. 15% and the depreciation charge will be 15% x the original value.

(d) **Sum of the digits.** This method is a variation of the diminishing balance method in that the depreciation charge falls by a fixed amount each year. The method is calculated by summing the digits of the number of years over which an asset is to be depreciated and applying a proportion each year of the amount of the total sum of the digits. For example, if an asset costing R50,000 is depreciated over five years using the sum of the digits method, then the depreciation is calculated on a proportion of \( 5 + 4 + 3 + 2 + 1 = 15 \). Therefore, the depreciation charge each year is:

<table>
<thead>
<tr>
<th>Year</th>
<th>Sum of Digits</th>
<th>Depreciation Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>5</td>
<td>16,667</td>
</tr>
<tr>
<td>Year 2</td>
<td>4</td>
<td>13,333</td>
</tr>
<tr>
<td>Year 3</td>
<td>3</td>
<td>10,000</td>
</tr>
<tr>
<td>Year 4</td>
<td>2</td>
<td>6,667</td>
</tr>
<tr>
<td>Year 5</td>
<td>1</td>
<td>3,333</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50,000</td>
</tr>
</tbody>
</table>

The depreciation method for an asset should be selected based on the expected pattern of economic benefits and should be consistently applied from period to period unless there is a change in the expected pattern of economic benefits from that asset.

### 5.4.3 Review of Useful Life

During the life of an asset it may be necessary to review the useful life because the original estimate of useful life becomes inappropriate. Technological factors or improvements to an asset may result in an increased or reduced useful life of the asset. The adjustment to the useful life of an asset should never be treated as giving rise to a prior year adjustment. Such an adjustment is deemed to be a change in estimate and in terms of AC 123 "the depreciation charge for the current and future periods should be adjusted". For example, if a company purchased an asset for R450,000 three years ago and the original expected useful life was six years and the asset has been depreciated on the straight line basis for the previous two years and it has now been decided that the asset will only last five years, then the depreciation charge is adjusted as follows:
Carrying amount before review of useful life = 300 000 \((450 000 \times 2/6)\)

Remaining useful life = 3 years

Therefore, annual depreciation charge = 100 000.

The asset is therefore depreciated on the following basis over the five year useful life:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>75 000</td>
</tr>
<tr>
<td>Year 2</td>
<td>75 000</td>
</tr>
<tr>
<td>Year 3</td>
<td>100 000</td>
</tr>
<tr>
<td>Year 4</td>
<td>100 000</td>
</tr>
<tr>
<td>Year 5</td>
<td>100 000</td>
</tr>
<tr>
<td>Total</td>
<td>450 000</td>
</tr>
</tbody>
</table>

Alternatively, “catch-up” depreciation could be accounted for in year 3:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>75 000</td>
</tr>
<tr>
<td>Year 2</td>
<td>75 000</td>
</tr>
<tr>
<td>Year 3</td>
<td>120 000</td>
</tr>
<tr>
<td>Year 4</td>
<td>90 000</td>
</tr>
<tr>
<td>Year 5</td>
<td>90 000</td>
</tr>
<tr>
<td>Total</td>
<td>450 000</td>
</tr>
</tbody>
</table>

The depreciation in year 3 is calculated as follows:

\[ \text{R}450 000 \div 5 = \text{R}90 000 \] of depreciation assuming a five year useful life, plus \(2 \times (90 000 - 75 000)\), being “catch-up” depreciation for years 1 and 2 where depreciation of \text{R}75 000 and not \text{R}90 000 (based on the revised estimated useful life) was charged.

Either of these two approaches appear to be sanctioned by AC 123 in that the depreciation for the current and future periods is adjusted in both cases.

5.4.4 Review of Depreciation Method

Method A change in the depreciation method is allowed by AC 123 if there has been a significant change in the expected pattern of economic benefits relating to an asset. “When such a change in depreciation method is necessary the change should be accounted for as a change in accounting estimate and the depreciation charge for the current and future periods should be adjusted” (AC 123 paragraph 56). As with a change in the useful life of an asset, note that a change in depreciation method is not a change in accounting policy and therefore cannot be treated as a prior year adjustment. The carrying amount should be written off over the remaining useful life starting with the year in which the depreciation method is changed.
For example, assume that a company purchased an item of plant three years ago at a cost of R90 000. Previously, the company depreciated the plant at 15% on the diminishing balance method but in the current period (i.e. the third year of ownership) decided that it should be written off on the straight line basis over the four remaining years of its useful life of seven years. The carrying amount of the asset will be determined as follows:

<table>
<thead>
<tr>
<th>Cost</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Depreciation</td>
<td>(13 500)</td>
</tr>
<tr>
<td>Year 2 Depreciation (76 500 x 15%)</td>
<td>(11 475)</td>
</tr>
<tr>
<td>Net book value at start of Year 3</td>
<td>65 025</td>
</tr>
</tbody>
</table>

Therefore, the depreciation charge on the straight line basis in years 3 to 7 will be R13 005 (65 025 ÷ 5).

Alternatively, "catch-up" depreciation could be accounted for in the same way as shown in section 5.4.3 above.

### 5.4.5 Diminution in Value

Where an asset has fallen in value then it should be written down to its new value. For example, the usefulness of an item of property, plant and equipment may be impaired by damage or technological obsolescence or other economic factors. This impairment may result in the recoverable amount (see section 5.1.2 on Definitions) being less than the carrying amount of the asset. In this case a write down of the asset is necessary.

AC 123 requires the amount of the reduction in the carrying amount to "be recognised as an expense immediately, unless it reverses a previous revaluation in which case it should be charged to equity", i.e. the revaluation surplus (see section 5.5.3) (AC 123 paragraph 57).

Note that the recoverable amount of individual assets, or groups of identical assets, is determined separately and the carrying amount reduced to recoverable amount on an individual asset, or group of identical assets, basis.

Where there is a subsequent increase in the recoverable amount of an asset that has been written down, then the previous write down can be written back when the circumstances and events that led to the write down or write off cease to exist, and there is persuasive evidence that the new circumstances and events will persist for the foreseeable future. The amount written back is reduced by the amount that would have been recognised as depreciation had the write down or write off not occurred.
For example, if an asset purchased three years ago for R100 000 and depreciated on the straight line basis over ten years was written down by R10 000 in year 3 then the carrying value at the end of year 3 is R60 000 (depreciation of R10 000 x 3 + R10 000 write down). The depreciation charge in year 4 will be based on the carrying amount of R60 000 over the remaining useful life of seven years, i.e. R8 571. If at the end of year 6 the circumstances that gave rise to the write down in year 3 no longer exist then that write down may be reversed but must be reduced by the depreciation that would have been recognised, i.e. R10 000 p.a. had the write down not occurred. Note that in years 4, 5 and 6 depreciation of R8 571 was charged whereas R10 000 would have been charged had the write down not occurred, i.e. the effect of the write down on depreciation charged in years 4, 5 and 6 is R4 287 ((R10 000 – R8 571) x 3)). Therefore, the write back at the end of year 6 is R5 713 (R10 000 – R4 287) and the net book value of the asset is as originally anticipated at the end of year 6, i.e. R40 000 (60 000 – 8 571 – 8 571 + 5 713).

5.5 Revaluations

5.5.1 Fair Value

The revaluation of property, plant and equipment is allowed by the alternative accounting treatment envisaged by AC 123. An overriding criteria is that an item of property, plant and equipment may only be revalued when the entire class relating to that item of property, plant and equipment is revalued. A class of property, plant and equipment is a grouping of assets of a similar nature and use in an enterprise’s operations. AC 123 (paragraph 39) lists the following examples of separate classes:

- land
- land and buildings
- machinery
- ships; aircraft
- motor vehicles
- furniture and fixtures
- office equipment.

Where an item of property, plant and equipment is revalued then the asset is carried at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation. AC 123 notes that
revaluations should be made with sufficient regularity such that the carrying amount does not differ materially from that which would be determined using fair value at the balance sheet date.

The fair value of land and buildings is normally determined by external valuers and is based on its market value for existing use, which presupposes continued use of the asset in the same or a similar business. Sometimes internal valuers are used where there is an internal property department that has a large number of qualified valuers.

The fair value of items of plant and equipment is usually the market value determined by appraisal. If the market value is not easily determinable then property, plant and equipment can be valued at depreciated replacement cost. In all cases property, plant and equipment is valued on the basis of its existing use.

5.5.2 Frequency of Revaluations

Usually, revaluations are only required every three to five years, but the frequency of revaluations depends upon the level of movements in fair value of items of property, plant and equipment. When the fair value of a revalued asset differs materially from its carrying amount then a further revaluation is necessary.

5.5.3 Revaluation Surplus

When an item of property, plant and equipment is revalued, the amount of the revaluation is credited to a revaluation surplus which is a non distributable reserve included in an enterprise’s equity. The amount of the revaluation surplus is the net increase in the net book value of the asset that has been revalued. AC 123 allows two possible treatments for the accumulated depreciation at the revaluation date. The accumulated depreciation may either be restated to reflect the change in the gross carrying amount of the asset or may be eliminated against the gross carrying amount of the asset. The following example illustrates the two possible approaches.

Assume that a company purchased an asset four years ago for R100 000. The asset was being depreciated on the straight line basis over ten years. The company decided to revalue the asset at the end of the fourth year and the fair value of the plant was considered to be R75 000 at that date. If the company wishes to show the asset at its gross carrying amount and to proportionately restate the accumulated depreciation then the revaluation journal entry would be as follows:
Notice that the asset is now stated at "cost" of R125 000 (100 + 25) less accumulated depreciation of R50 000 (40 + 10), i.e. a carrying amount or net book value of R75 000. The net increase in the carrying amount is R15 000.

Alternatively, the company may elect to eliminate the accumulated depreciation at the date of the revaluation and to show the asset at the net revalued amount of R75 000. This is achieved by the following entry:

<table>
<thead>
<tr>
<th>Dr</th>
<th>Accumulated Depreciation</th>
<th>40 000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cr</td>
<td>Asset</td>
<td>25 000</td>
</tr>
<tr>
<td>Cr</td>
<td>Revaluation Surplus (NDR)</td>
<td>15 000</td>
</tr>
</tbody>
</table>

The increased carrying amount of R15 000 will be depreciated over the remaining useful life of the asset, i.e. 6 years. Annual depreciation will, therefore, amount to R12 500 (R10 000 historical cost depreciation and R2 500 revaluation depreciation). Paragraph 43 of AC 123 allows the revaluation surplus (R15 000) to be transferred to retained earnings as the asset is depreciated, i.e. R2 500 p.a. will be transferred from NDR to retained earnings each year. Alternatively, the revaluation surplus is left intact as a capital maintenance reserve and not transferred to retained earnings as the asset is depreciated.

If there is a subsequent impairment in the value of the revalued asset then the amount of the decrease in value should be taken from the revaluation surplus. If the amount of the impairment exceeds the original amount of the revaluation then the excess would be charged as an expense in the income statement. Similarly, "a revaluation increase should be recognised as income to the extent that it reverses a revaluation decrease of the same asset previously recognised as an expense" (AC 123 paragraph 41).

AC 123 states that the revaluation surplus may be transferred directly to retained earnings when the surplus is realised. The surplus is realised on the disposal of the asset or as the asset is used by the enterprise. Therefore, the difference between profit on sale based on the revalued carrying amount of an asset and profit on sale based on the asset's original cost could be transferred from the revaluation surplus directly to retained earnings when a revalued asset is sold.
5.6 Financial Statement Presentation

5.6.1 Accounting Policy

Suitable wording for an accounting policy on property, plant and equipment may be as follows:

- Land and buildings are valued on an open market basis every three years. The revaluation surplus is credited to non distributable reserves. On disposal, the net revaluation surplus is transferred to retained earnings while profits or losses on disposal based on current values, are credited or charged to income.

- Plant, equipment and vehicles are stated at historical cost less accumulated depreciation. Depreciation is calculated to write off the cost on a straight line basis over the expected useful life of the assets.

Note that rates of depreciation or useful lives should be disclosed as part of the accounting policy where these are considered to be meaningful. Disclosure of the rates and useful lives is usually only meaningful when there is not a large range of rates or useful lives.

5.6.2 Companies Act

Schedule 4 to the Companies Act has the following requirements relating to property, plant and equipment:

- **Paragraph 20**: Fixed assets, capitalised leased assets, current assets and assets that are both fixed nor current should be separately identified.

- **Paragraph 21**: The method used to arrive at the amount of fixed assets should be stated.

- **Paragraph 22(1)**: The method of arriving at the amount of any fixed asset whether tangible or intangible shall be to take the difference between –
  - (a) its cost, or if it has been revalued, the amount of the valuation; and
  - (b) the aggregate amounts provided or written off since the date of acquisition or valuation, as the case may be, for depreciation or diminution in value.

- **Paragraph 22(2)**: In respect of the assets referred to in paragraph 22(1), the following should be shown –
  - the aggregate of cost or valuation; and
  - the aggregate of accumulated depreciation and provisions for diminution in value.
Paragraph 22(3) In respect of land and buildings:
- description and situation
- date of acquisition
- purchase price
- cost of additions or improvements since acquisition or valuation.

If there are more than five different items of land and buildings then the information may be included in a separate register or schedule.

Paragraph 22(4) In the case of revalued land and buildings:
- description and situation
- most recent year of valuation
- names and qualifications of valuers in respect of valuations carried out in the current year
- basis of valuation
- policy regarding frequency of valuation.

If there are more than five different items of land and buildings then the information may be included in a separate register or schedule.

Paragraph 42(o) Amount charged to income by way of provisions, specifying the nature (e.g. diminution in value).

Paragraph 44 If depreciation is not provided for or some other method than depreciation is used then the fact of not providing depreciation or the other method used should be disclosed.

5.6.3 AC 123

AC 123 incorporates the disclosure requirements of Schedule 4 in addition to certain other requirements:

- in respect of each class of property, plant and equipment:
  - measurement basis;
  - depreciation method;
  - useful lives or depreciation rates;
  - gross carrying amount and accumulated depreciation at the beginning and end of the period;
  - reconciliation of carrying amount at the beginning and end of the period showing (where applicable):
• additions,
• disposals,
• acquisitions through business combinations,
• revaluation movements,
• provisions for write downs/write backs in value,
• depreciation,
• exchange differences arising on translation, and
• other movements;

• details of any restrictions on title or pledges of property, plant and equipment;
• accounting policy for restoration costs (where applicable);
• expenditure on property, plant and equipment under construction;
• commitments for the acquisition of property, plant and equipment;
• whether discounting techniques have been used to determine recoverable amount; and
• in respect of property, plant and equipment that is revalued:
  – basis of valuation,
  – effective date of valuation,
  – whether valuer was independent,
  – nature of indices used (where applicable),
  – the carrying amount of each class of revalued property, plant and equipment at cost less accumulated depreciation, and
  – revaluation surplus and the movement thereon for the period.

5.7 Taxation

5.7.1 Deferred Taxation

The accounting treatment for property, plant and equipment often gives rise to deferred taxation because of the timing difference between the recognition of depreciation for accounting purposes and wear and tear allowances granted by the Receiver of Revenue. These timing differences are accounted for in the normal way (see chapter 2).
Where an item of property, plant and equipment is revalued, then a permanent difference arises between accounting income and taxable income because the revaluation is not recognised by the Receiver of Revenue. A revaluation of an item of plant, for example, would give rise to depreciation charges that are in excess of the historical cost based depreciation. This extra depreciation is not recognised for tax purposes and therefore represents a permanent difference. This permanent difference would be identified in the tax reconciliation disclosure that is required by AC 102 (refer chapter 2).

5.8 Investment Properties

Investment properties may be accounted for as property in accordance with AC 123 or in accordance with the relevant paragraphs in AC 106 (refer section 5.1.1).

AC 106 defines investment properties as those “which, based on intention and the particular circumstances, are classified as such by management” (paragraph 07). The key determinant, therefore, is one of management intention. In contrast, IAS 25 defines an investment property as “an investment in land or buildings that are not occupied substantially for use by, or in the operations of the investee enterprise or another enterprise in the same group as the investing enterprise” (paragraph 04). The international accounting standard’s definition centres around two issues:

- the land or buildings must be held for investment purposes; and
- the land or buildings should not be substantially owner-occupied.

In terms of both AC 106 and IAS 25, investment properties may either be treated as depreciable assets and accounted for in accordance with AC 123 (or IAS 16 (revised)), or classified as investments and not depreciated. Where an investment property is treated as an investment, in terms of AC 106, it is stated at cost and disclosure is made of the most recently determined open market value. IAS 25 allows the investment to be carried in the balance sheet at either cost or revalued amounts. Similar disclosure about open market value is required.

The definition of investment properties in AC 106, because it is based on management intention, provides preparers of financial statements with considerable scope to avoid the depreciation of buildings. In addition, the definition makes no mention of owner-occupied properties.

5.8.1 Depreciation of Properties

There is a general assumption that items of property, plant and equipment
should be depreciated. These assets all have limited useful lives and economic benefits are consumed when they are used. It is, however, generally accepted that land has an indefinite useful life and does not, except for specialised circumstances, consume economic benefits when used. Thus, land should not be depreciated but buildings, plant and equipment should be depreciated by a systematic allocation of the costs thereof to match against related revenues. This depreciation arises from the consumption of economic benefits and is no more than the allocation of a historical cost to the period in which economic benefits are consumed, presumably in an effort to generate further benefits, i.e. profits.

The overriding presumption of the depreciation argument is that assets are held for use in the generation of economic benefits. In contrast, if an asset is held for investment purposes then it is the current value of such an asset that is important, not its depreciated historical cost. It is therefore also the current value that needs to be included in the financial statements in order to provide a proper understanding of the position of the enterprise. It is argued that the calculation of a depreciation charge would not be useful to the user of such financial statements. Therefore, an item of property held for investment purposes need not be depreciated; the change in its fair value is considered more significant than its depreciation.

Most South African companies that hold investment properties do not depreciate them; instead they are carried at cost and the open market value is disclosed. This allows users to assess the current value of the investment properties.

5.8.2 Specialised Buildings

AC 106 defines a specialised property as "that kind of property which is rarely, if ever, sold except by way of a sale of the business in occupation due to the specialised nature of the buildings, their construction, arrangement, size, location or otherwise" (paragraph 21). A specialised property is not classified as an investment property unless it can be bought and sold or leased in the open market and can be valued by reference to its trading potential, for example a hotel or a cinema. Non-specialised properties are those for which there is general demand and which can generally be bought and sold or leased in the open market with vacant possession.

IAS 25 does not address the issue of specialised versus non-specialised properties.

5.8.3 Disclosure

Where investment properties are treated as depreciable assets then the disclosure requirements of AC 123 (refer section 5.6.3) apply.
Where investment properties are not treated as depreciable assets then in terms of AC 106 the following should be disclosed:

- the carrying values;
- the most recently established open market values;
- the effective date of valuation;
- whether the valuation was independent or internal; and
- any provision made to recognise permanent declines in value.

In addition, if management considers that factors have occurred since the most recent valuation to render its use and disclosure misleading then these factors should be disclosed.

5.8.4 Owner-occupied Properties

Properties AC 106 makes no reference to owner-occupied properties in the definition of investment properties. This is in contrast to IAS 25, SSAP 19 (UK), and SSAP 17 (New Zealand) where owner-occupied properties are excluded from the definition of investment properties. This exclusion is consistent with the arguments considered briefly above (section 5.8.1) relating to the use of an asset versus an investment therein. It is difficult to argue that an owner-occupied building is not consuming economic benefits and that it is available for re-sale in the ordinary investment sense. Therefore, it seems appropriate that owner-occupied properties be excluded from classification as investment properties. AC 106, however, allows owner-occupied buildings to be classified as investment properties, based on the intention of management. A number of South African companies follow this view and the implication of adopting IAS 25 in the future is therefore significant.
6 Borrowing Costs

6.1 Introduction

6.1.1 Borrowing Costs

Borrowings costs are regularly incurred by enterprises during the normal course of their business operations. Where borrowing costs are incurred in order to finance the acquisition, construction or production of assets, it is often argued that these costs form part of the historical cost of the asset. Therefore, AC 114, Capitalisation of Borrowing Costs (revised March 1995), allows borrowing costs to be capitalised to the historical cost of qualifying assets provided that certain criteria are met. These criteria are considered, together with an example, in section 6.3.2.

As part of the South African Institute of Chartered Accountants' international harmonisation programme, ED 92, Borrowing Costs, was issued during February 1994. The revised AC 114 was issued in March 1995. AC 114 (revised) is based on IAS 23 (revised). The only difference in principle between ED 92 and AC 114 (revised) is that AC 114 (revised) requires borrowing costs to be expensed in the period incurred, but allows an alternative policy of capitalisation providing certain criteria are met, whereas ED 92 permits the alternative treatment only.

Usually, capitalised borrowing costs are those costs incurred that theoretically could have been avoided during the period if expenditures for certain qualifying assets had not been made. Borrowing costs need not arise from borrowings specifically made to acquire the qualifying assets. The amount of borrowing costs to be capitalised may be determined using the borrowing costs incurred on specific borrowings, using the weighted average cost of borrowings or a combination of the two.

Borrowing costs are capitalised to the historical cost of assets only when expenditures have been incurred and activities necessary to bring the asset to its intended use are in progress. Borrowing costs are not usually capitalised to the cost of inventory that is routinely manufactured or otherwise produced in large quantities on a repetitive basis.

6.1.2 Cost of Equity

The construction or acquisition of assets may be funded by both debt and equity. However, AC 114 does not deal with the imputed cost of equity,
including preference capital that is not classified as a liability. Therefore, where equity is used to finance the acquisition of a qualifying asset then the cost of that equity may not be capitalised to the historical cost of that asset. This is in contrast to where debt is used and borrowing costs may be capitalised to the cost of the asset.

6.2 Conceptual Issues

6.2.1 Definitions

AC 114 defines borrowing costs as interest and other costs incurred by an enterprise in connection with the borrowing of funds. Examples of borrowing costs are:

- interest on bank overdrafts and short term and long term borrowings;
- amortisation of discounts or premiums relating to borrowings;
- amortisation of ancillary costs incurred in connection with the arrangement of borrowings;
- finance charges in respect of finance leases recognised in accordance with the statement on accounting for leases in the financial statements of lessees;
- exchange differences arising from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs; and
- hedging costs, including premiums on forward exchange contracts and interest rate and currency options.

AC 114 describes expenditures on a qualifying asset as those expenditures that have resulted in payments of cash, transfers of other assets or the assumption of interest-bearing liabilities (paragraph 21).

Qualifying assets are defined as assets that necessarily take a substantial period of time to get ready for their intended use or sale (AC 114 paragraph 4). Examples of qualifying assets are inventory that requires a substantial period of time to bring it to a saleable condition, manufacturing plants, power generation facilities and investment properties. AC 114 does not elaborate on what is meant by "a substantial period of time". This permits borrowing costs to be capitalised to inventory which has a long maturation period before it can be sold as an end product, for example wine or whisky. Assets that are ready for their intended use or sale when acquired are not qualifying assets.
6.2.2 Asset Recognition

AC 000 defines an asset as a resource controlled by the enterprise as a result of a past event and from which future economic benefits are expected to flow to the enterprise (paragraph 49(a)). The relevant test, therefore, for the capitalisation of borrowing costs is whether or not the borrowing cost will give rise to future economic benefits flowing to the enterprise. This implies that the historical cost of the asset combined with borrowing costs capitalised must be capable of recovery through future economic benefits. (This has implications when assessing the recoverable amount or the net realisable value of an asset and is considered further in section 6.3.4.) Therefore, borrowing costs that are directly attributable to the acquisition, construction or production of an asset may be included in the cost of that asset when it is probable that such borrowing costs will result in future economic benefits to the enterprise and the cost can be measured reliably. Otherwise, borrowing costs meet the definition of an expense and should be recognised as an expense in the period in which they are incurred.

6.3 Specific Issues

6.3.1 Capitalisation in Group Situations

Borrowings costs may only be capitalised if they are being incurred. Therefore, if a qualifying asset is financed by interest free borrowings from the holding company then a subsidiary may not capitalise any interest assuming it has no other borrowings. In this situation, capitalisation will take place at the consolidated level since at this level both a qualifying asset and borrowing costs exist. The holding company may capitalise interest on its investment in a subsidiary or in an associate when the activities preparatory to the commencement of the investee’s planned operations are in progress. The investee’s preparatory activities would usually include the use of funds to acquire qualifying assets for its operations. The capitalisation of borrowing costs would stop when the investee commences its planned operations.

6.3.2 Borrowing Costs Eligible for Capitalisation

Where an enterprise has adopted a policy of capitalisation then the borrowing costs that may be capitalised are those costs that are directly attributable to the acquisition, construction or production of a qualifying asset. The amounts of borrowing costs that are directly attributable are usually determined by considering those borrowing costs that would have been avoided if the expenditure on the qualifying asset had not been made. The amount
of borrowing costs capitalised should be before taking account of taxation, as this is consistent with all other capitalised costs. The tax effects of capitalising are then dealt with through the deferred tax account (see section 6.5.1).

Borrowing costs may only be capitalised when:

- expenditures on the asset are being incurred;
- borrowing costs are being incurred;
- activities that are necessary to prepare the asset for its sale or intended use are in progress.

As noted in section 6.2.1, expenditures should include only those expenditures that have resulted in payments of cash, transfers of other assets or the assumption of interest bearing liabilities. The average carrying amount of the asset during a period, including borrowing costs previously capitalised, is normally a reasonable approximation of the expenditures to which the capitalisation rate is applied in that period.

The activities necessary to prepare the asset for its intended use or sale include more than merely the physical construction of the asset. For example, technical and administrative work during the pre-construction stage and activities undertaken after construction has begun in order to overcome unforeseen obstacles are included in the ambit of activities. However, activities that relate to the holding of an asset when no production or development that changes the asset’s condition is taking place are excluded. For example, “borrowing costs incurred while land is under development are capitalised during the period in which activities related to the development are being undertaken”. However, borrowing costs do not qualify for capitalisation if incurred “while land acquired for building purposes is held without any associated development activity” (AC 114 paragraph 22).

Where an enterprise borrows specific funds for the purpose of obtaining a particular qualifying asset then it is usually a simple process to identify the borrowing costs incurred that directly relate to that qualifying asset. However, it is often difficult to identify a direct relationship between particular borrowings and a qualifying asset when, for example, the financing activity of an enterprise is co-ordinated centrally. In addition, in a group situation, the group may use a range of debt instruments to borrow funds at different interest rates and then lend those funds on various bases to other enterprises in the group. The net result is that the determination of the amount of borrowing costs that are directly attributable to the acquisition of a qualifying asset is difficult and the exercise of judgement is required.
Where there are no directly associated borrowings, then the capitalisation rate, where possible, should be based on the additional borrowings incurred as a result of the expenditure on the qualifying asset. Where this is not possible, the total average borrowing cost is acceptable. For example, if a company has average borrowings during 1901 of R10 million and the interest paid during the year amounted to R1.8 million, then the capitalisation rate should be 18% ($1.8 \div 10 \times 100/1$). This rate is then applied to the expenditure incurred on qualifying assets. The expenditure could have occurred on the following basis:

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 January</td>
<td>R400 000</td>
</tr>
<tr>
<td>1 March</td>
<td>R700 000</td>
</tr>
<tr>
<td>1 July</td>
<td>R1 000 000</td>
</tr>
<tr>
<td>1 November</td>
<td>R2 100 000</td>
</tr>
</tbody>
</table>

Assuming that the qualifying asset is still being constructed at year end (31 December) then the interest to be capitalised may be calculated as follows:

\[
\begin{align*}
400 000 \times 18\% \times \frac{12}{12} &= 72 000 \\
700 000 \times 18\% \times \frac{10}{12} &= 105 000 \\
1 000 000 \times 18\% \times \frac{6}{12} &= 90 000 \\
2 100 000 \times 18\% \times \frac{2}{12} &= 63 000 \\
Total &= 330 000
\end{align*}
\]

Note that the above calculation could have been performed by calculating the average expenditure during the period and then applying the average cost of borrowings of 18% i.e.

\[
\begin{align*}
400 000 \times 12/12 &= 400 000 \\
583 333 \times 10/12 &= 583 333 \\
500 000 \times 6/12 &= 500 000 \\
350 000 \times 2/12 &= 350 000 \\
Total average expenditure &= 1 833 333 \times 18\% = R330 000
\end{align*}
\]

It is important to identify costs that are incurred at a specific point of time (i.e. in the above example) versus costs that are incurred over a period of time. For example, assume the same costs as the previous situation except that the expenditure of R400 000 on 1 January was actually incurred evenly over the two month period of January and February 1901. Because the costs of R400 000 were therefore accumulated over a two month period and not incurred at a specific point in time (i.e. on 1 January) it is necessary to average the expenditure in order to obtain a weighted average total of expenditure incurred. This weighted average expenditure may be calculated as follows:
Borrowing Costs

400 000 \times \frac{1}{2} (incurred evenly) \times \frac{2}{12} (Jan and Feb) = 33 333

400 000 \times \frac{10}{12} = 333 333

700 000 \times \frac{10}{12} = 583 333

1 000 000 \times \frac{6}{12} = 500 000

2 100 000 \times \frac{2}{12} = 350 000

Total weighted average expenditure = 1 800 000

.: Interest that may be capitalised is 1,8m \times 18\% = R324 000

Notice that when the expenditure of R400 000 is assumed to have incurred evenly over the period January and February then the amount of borrowing costs capitalised is reduced when compared to the amount of costs capitalised when it is assumed that the expenditure was incurred in total on 1 January.

The amount of borrowing costs capitalised during a period should not exceed the total of borrowing costs incurred during that period (see section 6.3.4).

The above example considered the use of general borrowings to finance a qualifying asset. Where an enterprise borrows funds specifically for the purpose of obtaining a particular qualifying asset, the borrowing costs that directly relate to that qualifying asset can be readily identified.

The financing arrangements may result in an enterprise incurring borrowing costs before some or all of the funds are used for expenditures on the qualifying asset. In these circumstances, the funds are often temporarily invested pending their use. In this case, it is necessary to offset any investment income against the borrowing costs incurred when determining the "amount of borrowing costs eligible for capitalisation during a period" (paragraph 15). Consider the following example:

A specific loan of R1m was raised on 1 January at 15\%. R0,5m was spent on a qualifying asset immediately but the other R0,5m was spent only on 1 February. Interest at 13\% was earned on the temporary investment of funds in January. The qualifying asset is still being constructed at 31 December.

In terms of AC 114, the borrowing costs eligible for capitalisation amount to R144 583 \{15\% \times 1 000 000 \} - (500 000 \times 13\% \times \frac{1}{2})\}; that is total borrowing costs incurred less interest income. On the basis that the general principle of AC 114 is that "those borrowing costs that would have been avoided if the expenditure on the qualifying asset had not been made" should be capitalised (paragraph 13), it is submitted that the entire R144 583 be capitalised. AC 114 does not require the use of a capitalisation rate for specific borrowings, rather the borrowing costs capitalised are those incurred
less related investment income. This means that AC 114 capitalises the deficit arising from investing funds at a lower rate than the cost of obtaining such funds. To illustrate, in the above example, R500 000 was invested at 13% in January while those funds cost 15%. The net cost of this is $2% \times 500 \times \frac{1}{2} = R833$. AC 114 allows this cost to be capitalised to the qualifying asset.

### 6.3.3 Capitalisation Period

Where the criteria for capitalising borrowing costs are met then the capitalisation continues until substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete, unless active development has been interrupted.

Borrowing costs may be incurred during an extended period in which the activities necessary to prepare an asset for its intended use or sale are interrupted. These borrowing costs are holding costs of partially completed assets and therefore do not qualify for capitalisation. However, capitalisation should not cease for brief interruptions in activities, interruptions that are caused by external factors, and delays that are inherent in the asset acquisition process. For example, a strike action by workers for a brief period would not result in the suspension of the capitalisation of borrowing costs.

Capitalisation of borrowing costs cease when the asset is ready for its sale or intended use. An asset is normally ready for its sale or intended use when the physical construction of the asset is complete even though routine administrative work may still continue. This point in time is somewhat subjective but the judgement is similar to that required where fixed assets are constructed and the recognition of depreciation and other expenses commences. The important issue is that interest should not be capitalised in situations where final completion is intentionally delayed.

When the construction of an asset is completed in parts and each part is capable of being used or sold while construction continues on other parts then capitalisation of borrowing costs should cease on each part as it is completed (AC 114 paragraph 27).

For example, a business park comprising several buildings, each of which can be used individually, is an example of an asset for which each part is capable of being sold or used separately while construction continues on other parts.

### 6.3.4 Limit to Capitalisation

The amount of borrowing costs capitalised during a period should not exceed the total amount of borrowing costs incurred by the enterprise in the
Borrowing Costs

period (AC 114 paragraph 17). Where the capitalisation of borrowing costs results in the carrying amount of the qualifying asset exceeding the net realisable value or the amount recoverable from its future use, the capitalisation of borrowing costs continues but a provision is made against the accumulated cost of the asset. The important issue is that net realisable value or the expected recovery of future economic benefits (recoverable amount) is not a factor that should limit the amount of borrowing costs capitalised. Rather, borrowing costs are capitalised if the criteria are met and the carrying value of an asset is assessed periodically against its net realisable value or recoverable amount and, if necessary, a provision for write down is made (which may subsequently reverse if no longer required).

6.3.5 IAS 23 and AC 114

As noted earlier, IAS 23 (revised) takes the view that borrowing costs should be expensed but allows the alternative of capitalisation provided that the criteria relating to qualifying assets are met. AC 114 (revised) adopts the same approach.

6.4 Financial Statement Presentation

6.4.1 Accounting Policy

Appropriate wording for an accounting policy may be as follows:

Borrowing costs are capitalised in relation to items of plant requiring a substantial period of time for preparation for sale or for intended use. If the capitalised cost of assets where borrowing costs have been capitalised exceeds the estimated recoverable amount then provision is made for such excess.

6.4.2 Companies Act

Schedule 4 to the Companies Act requires, in terms of paragraph 42 (f), “the amount of interest (or other consideration) on any loans, including debentures and bank overdrafts made to the company identifying the portion, if any, capitalised during the period” to be disclosed.

6.4.3 AC 114

The disclosure requirements of AC 114 are as follows:

- the accounting policy adopted for borrowing costs;
• the amount of borrowing costs incurred during the period, distinguishing between amounts capitalised and expensed; and
• the capitalisation rate used to determine the amount of borrowing costs eligible for capitalisation.

6.5 Taxation

6.5.1 Deferred Taxation

Deferred taxation may arise where borrowing costs are capitalised as the Receiver of Revenue would normally allow the borrowing costs to be deducted in full in the year in which they arise (in terms of s11(a) or s11(bA)). This would give rise to timing differences between the recognition of borrowing costs for accounting purposes and taxation purposes. These timing differences should be treated in the normal way and would give rise to a deferred tax liability.
7 Construction Contracts

7.1 Introduction

The allocation of contract revenue and related expenses to accounting periods over the duration of a contract is the primary issue in accounting for construction contracts. The nature of construction activity is such that the date at which a contract is entered into and the date when a contract is completed often fall into different accounting periods.

AC 109, Construction Contracts, issued in August 1995 and based on IAS 11 (revised), defines a construction contract as “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”. Projects involving the construction of bridges, buildings, dams, pipelines, roads, ships and tunnels would therefore be classified as construction contracts. Contracts for the provision of services are regarded as construction contracts to the extent that they are directly related to a long term construction contract, for example project managers’ and architects’ services.

7.1.1 Types of Construction Contracts

There are a number of different types of construction contracts, for example lump sum (fixed price) contracts, schedule of rates contracts, cost plus contracts and guaranteed maximum price contracts. It is generally accepted that contracts can be separated into two classifications. Firstly, fixed price contracts in which the contractor agrees to a fixed contract price or a fixed rate per unit of output. Secondly, a cost plus contract in which the contractor is reimbursed for allowable or otherwise defined costs plus a percentage of those costs or a fixed fee.

Escalation clauses built in to fixed price contracts usually allow the amounts payable under a contract to be adjusted for increases or decreases in such items as wage rates, charges amended by statutory authorities, the ruling market price of material, freight, insurance premiums, import duties, rates of exchange and delivery charges.

7.2 Conceptual Issues

Long term construction contracts extend over more than one accounting period. The basic problem therefore is determining the period or periods in
which income should be recognised. Conceptually, elements of financial statements should be recognised (AC 000 paragraph 83) if:

(a) it is probable that any future economic benefit associated with the item will flow to or from the enterprise; and

(b) the item has a cost or value that can be measured with reliability.

The recognition of revenue and expenses relating to construction contracts, therefore, needs to be determined according to the above recognition criteria. Contract revenue and expenses should only be recognised when it is probable that future economic benefits associated with the revenue and expense will flow to or from the enterprise and the amount of expenses and revenue can be measured with reliability.

The probability associated with the reliable measurement of contract revenue and expenses becomes easier to assess as contract activity progresses.

7.2.1 Future Economic Benefits

The probability that future economic benefits will flow to an enterprise engaged in construction contract activity is dependent on the outcome of that activity. Only once that probability has been established can there be any degree of certainty about the future economic benefits associated with the contract. Once there is sufficient certainty about future economic benefits (i.e. revenue) that will flow to the enterprise then expenses associated with the contract may be capitalised and recognised as an asset, provided the expenses can be measured reliably.

7.2.2 Reliability

During the first stages of the contract it is often the case that the contract outcome cannot be estimated with any degree of reliability. However, when contract revenue can be measured reliably and the costs to complete a contract and the stage of contract completion at the accounting period date can be measured reliably then income (i.e. contract revenue less contract expense) should be recognised by reference to the stage of completion of the contract activity. The reliability of current estimates of future revenue and expenses is therefore a key factor when assessing the extent to which income associated with partial completion of a contract should be recognised.

7.2.3 Accounting Treatment

The accounting treatment of a construction contract depends therefore on whether or not the outcome of the contract can be measured reliably.
Where the outcome cannot be measured reliably then no income should be recognised. However, in order to correctly reflect the level of activity undertaken by the construction company, revenue should be recognised to the extent of costs incurred that are recoverable and contract costs should be recognised as expenses in the period when incurred. The recognition of such revenue and related costs provides useful information about the extent of contract activity in the period.

When the outcome of a construction contract can be estimated reliably then the revenue and expenses associated with the construction contract should be recognised by reference to the stage of completion at the balance sheet date. This implies recognition of a portion of the total anticipated contract income (i.e. revenue less expenses).

Where it is probable that total contract costs will exceed total contract revenues then the excess contract costs should be recognised immediately as an expense (see also section 7.4.3 below).

7.3 Recording

Revenue and costs are recognised during the period of the contract whereas, formerly, according to the previous AC 109, costs and contract profits/losses were accumulated in work in progress until the completion of the contract.

7.3.1 Completed Contract Method

The completed contract method has its origin in the prudence concept. This method recognises income only after all work on a contract is complete. (Minor costs which may occur at the end of a contract may be ignored when deciding whether or not a contract is complete.) The prudence concept has become dated and is not endorsed specifically by the framework (AC 000). In addition, AC 109 (revised and issued August 1995) does not sanction the use of the completed contract method.

An advantage of the completed contract method is that it does not depend upon estimates for income recognition and therefore eliminates any risk of recognising income that may not eventuate or is subject to subsequent adjustment. This method however does not conform with the framework in that revenue and any associated costs are not recognised even when the related economic benefits can be reliably measured. In addition, the completed contract method does not fairly report operating results in each accounting period. It often results in wide fluctuations in income between accounting periods.
7.3.2 Stage of Completion Method

The stage of completion method recognises income on the basis of the stage of completion of the contract activity at the end of each accounting period. The advantage of this method is that it reflects contract revenue and expenses in the accounting period during which the related activity was undertaken, i.e. the costs incurred in reaching the stage of completion are matched with the revenue, resulting in the reporting of income which can be attributed to the proportion of work completed.

The stage of completion of a contract can be determined in a number of ways. For example, the proportion that costs incurred for work performed to date bear to the estimated total costs of the contract would indicate activity based on costs incurred to date over total anticipated costs. Further examples of measuring the stage of completion of a contract may be surveys of work performed and completion of a physical proportion of the contract work or any combination of these methods.

The method adopted by a construction company should be the one that most closely approximates the stage of completion.

It should be noted that progress payments and advances received from customers do not necessarily reflect the stage of completion.

The following example illustrates the use of the stage of completion method:

Example

The XYZ Construction Company signs a contract on 1 August 1901 to construct a bridge. The contract price (fixed) is R17m and expected total costs are R15.2m. The bridge was completed in June of 1903.

Details of costs incurred and receipts are as follows:

<table>
<thead>
<tr>
<th>31 DECEMBER</th>
<th>1901</th>
<th>1902</th>
<th>1903</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs to date</td>
<td>3 750</td>
<td>14 000</td>
<td>15 500</td>
</tr>
<tr>
<td>Estimated additional costs to complete</td>
<td>11 450</td>
<td>1 500</td>
<td>NIL</td>
</tr>
<tr>
<td>Progress billings</td>
<td>3 300</td>
<td>11 100</td>
<td>2 600</td>
</tr>
<tr>
<td>Payments received from customers</td>
<td>3 000</td>
<td>10 500</td>
<td>3 500</td>
</tr>
</tbody>
</table>

The estimated contract income (revenue) to be recognised each year can be calculated on the basis of the proportion that costs incurred to date bear to the estimated total costs as follows:
**Construction Contracts**

<table>
<thead>
<tr>
<th>Year</th>
<th>Contract Price</th>
<th>(R000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>Income recognised in 1901: $3,750/15,200 \times 17,000 = 4,194</td>
<td>17,000</td>
</tr>
<tr>
<td></td>
<td>The contract is 24.67% complete</td>
<td></td>
</tr>
<tr>
<td>1902</td>
<td>Estimated total income to year 1902: $14,000/15,500 \times 17,000 = 15,355</td>
<td>17,000</td>
</tr>
<tr>
<td></td>
<td>Less: Recognised in year 1901: $4,194</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income recognised in 1902: $11,161</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The contract is 90.32% complete</td>
<td></td>
</tr>
<tr>
<td>1903</td>
<td>Total income (contract complete): $17,000</td>
<td>17,000</td>
</tr>
<tr>
<td></td>
<td>Less: Recognised in previous years: $15,355</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income recognised in 1903: $1,645</td>
<td></td>
</tr>
</tbody>
</table>

Note that the change in estimated costs (from 15,200 to 15,500) is taken into account when using the stage of completion method because the most recent estimate of expenses (and revenues if changed in terms of claims, incentives or variations) is used to calculate cumulative income to date. This is adjusted by income previously recognised (i.e. on the previous cost estimates) to ensure that total income recognised to date is accurate.

Note that in the above example, income in 1901 is based on the current estimates of costs (i.e. 1901 estimates). Had income in 1901 been recognised on the basis of 1902 cost estimates then it would have been calculated as $3,750/15,500 \times 1,500 = 363$; and income in 1902 would have been $1,355 - 363 = 992$ which is equivalent to the expected proportion of income relating to the costs actually incurred during 1902, i.e. $(14,000 - 3,750)/15,500 \times 1,500 = 992$. The income recognised in 1902 of 911 is, therefore, 992 relating to current year (1902) activity and 81 relating to a correction of the assessment of income in 1901.

The following summarises the stage of completion method:

<table>
<thead>
<tr>
<th></th>
<th>1901</th>
<th>1902</th>
<th>1903</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract income</td>
<td>4,194</td>
<td>11,161</td>
<td>1,645</td>
</tr>
<tr>
<td>(revenue)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td>(3,750)</td>
<td>(10,250)</td>
<td>(1,500)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net profit</td>
<td>444</td>
<td>911</td>
<td>145</td>
</tr>
<tr>
<td>recognised</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amounts due to/from customers</td>
<td>894</td>
<td>955</td>
<td>NIL</td>
</tr>
<tr>
<td>Debtors</td>
<td>300</td>
<td>900</td>
<td>NIL</td>
</tr>
</tbody>
</table>
Note that the amounts due to/from customers account can be viewed as the net investment in the contract; that is the gross amount due to/from customers for contract work. This balance is the net amount of costs incurred plus recognised profits, less the sum of recognised losses and progress billings (refer AC 109 paragraphs 43 and 44). This is illustrated for the above contract:

1901: \[4194 \text{ (a)} - 3300 = 894\]
1902: \[894 + 11161 \text{ (b)} - 11100 = 955\]
1903: \[955 + 1645 \text{ (c)} - 2600 = \text{NIL}\]

(a) \[3750 + 444 = 4194\]
(b) \[10250 + 911 = 11161\]
(c) \[1500 + 145 = 1645\]

The accounting entries may be recorded as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Transaction</th>
<th>Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1901</td>
<td>Dr Contract expenses</td>
<td>3750</td>
</tr>
<tr>
<td></td>
<td>Cr Creditors/Cash</td>
<td>3750</td>
</tr>
<tr>
<td></td>
<td>Recognition of costs incurred.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Debtors</td>
<td>3300</td>
</tr>
<tr>
<td></td>
<td>Cr Amounts due to/from customers</td>
<td>3300</td>
</tr>
<tr>
<td></td>
<td>Accumulation of amounts billed during the year.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Cash</td>
<td>3000</td>
</tr>
<tr>
<td></td>
<td>Cr Debtors</td>
<td>3000</td>
</tr>
<tr>
<td></td>
<td>Recognition of cash received.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Amounts due to/from customers</td>
<td>4194</td>
</tr>
<tr>
<td></td>
<td>Cr Contract revenue</td>
<td>4194</td>
</tr>
<tr>
<td></td>
<td>Recognition of current year's revenue.</td>
<td></td>
</tr>
</tbody>
</table>

| 1902 | Dr Contract expenses | 10250 |
|      | Cr Creditors/Cash | 10250 |
|      | Recognition of costs incurred. |
|      | Dr Debtors | 11100 |
|      | Cr Amounts due to/from customers | 11100 |
|      | Accumulation of amounts billed during the year. |
|      | Dr Cash | 10500 |
|      | Cr Debtors | 10500 |
|      | Recognition of cash received. |
|      | Dr Amounts due to/from customers | 11161 |
|      | Cr Contract revenue | 11161 |
|      | Recognition of current year's revenue. |
1903

(i) Dr Contract expenses 1 500
    Cr Creditors/Cash 1 500
  Recognition of costs incurred.

(ii) Dr Debtors 2 600
     Cr Amounts due to/from customers 2 600
  Accumulation of amounts billed during the year.

(iii) Dr Cash 3 500
      Cr Debtors 3 500
  Recognition of cash received.

(iv) Dr Amounts due to/from customers 1 645
     Cr Contract revenue 1 645
  Recognition of current year's revenue.

The balances of amounts due to/from customers would, therefore, be as follows for each respective year:

1901: $4,194 - 3,300 = 894$
1902: $894 + 11,161 - 11,100 = 955$
1903: $955 + 1,645 - 2,600 = 0$

7.4 Specific Issues

7.4.1 Conservative Use of Stage of Completion Method

Some companies who use the stage of completion method have a policy that no profits should be recognised on a contract until it has reached a given stage of completion. For example, XYZ Construction Company might have a policy that states "profit is only recognised under the stage of completion method in long term construction contracts which are at least 60% complete".

This conservative use of the stage of completion method exists as a result of the uncertainty inherent in estimating costs to complete construction contracts, particularly during the early stages of the construction period. A problem with this practice is that reported income can be distorted because income is not recognised proportional to the work carried out during any accounting period. This is particularly the case where the higher the minimum percentage becomes, the closer this method comes to the completed contract method. A further problem is where companies are allowed to vary this minimum percentage from year to year and from contract to contract. In this way net income can be increased or decreased at management's discretion.
AC 109 gives guidance about the conservative use of the stage of completion method. The statement requires the use of the stage of completion method unless the outcome of a construction contract cannot be measured reliably. Where reliable measurement is not possible then revenue should be recognised only to the extent of costs incurred that are recoverable and contract costs should be recognised as an expense in the period when incurred. This approach sanctions use of the completed contract method only until reliable measurement of future revenue and costs is possible. From that period on, construction contracts would be recognised using the stage of completion method. This is a logical extension of the principles examined above under conceptual issues.

The advantage of the IAS approach (i.e. AC 109) is that a company is not fixed to a particular (and somewhat arbitrary) stage of completion prior to recognising profits. This makes it more difficult to manipulate profits by continually changing the minimum percentage from year to year or conservatively applying a set minimum percentage to construction contracts. Furthermore, this approach recognises that in certain cases the reliability of future revenue and expenses is so uncertain that income might well not be recognised until a contract is, say, 80% complete whereas income might be recognised on other contracts which are only, say, 10% complete but future revenue and expenses can be reliably measured.

7.4.2 Accumulation of Costs

AC 109 identifies three different groups of costs relating to construction contracts. These three groups are:

1. costs that relate directly to a specific contract;
2. costs that are attributable to the contract activity in general and can be allocated to a contract;
3. costs that are specifically chargeable to the customer under the terms of the contract.

Costs that relate directly to a specific contract would include:
(a) labour costs (including supervision);
(b) materials used;
(c) depreciation of plant and equipment used on the contract;
(d) costs of moving plant and equipment to or from the contract site;
(e) costs of hiring plant and equipment;
(f) costs of design and technical assistance that is directly related to the contract;

(g) expected warranty costs and claims from third parties (for example, subcontractors or penalties against the contractor arising from delays in the completion of the contract or from other causes).

Costs that relate to the contract activity in general and can be allocated to specific contracts include:

(a) insurance;

(b) design and technical assistance;

(c) construction overheads;

(d) borrowing costs (capitalised in terms of AC 114/IAS 23).

These costs are allocated using methods that are systematic and rational and are applied consistently to all costs having similar characteristics. Construction overheads would include costs such as the preparation and processing of construction personnel payroll.

Costs which are specifically chargeable to the customer under the terms of the contract may include some general administration costs and development costs for which reimbursement is specified in the terms of the contract. General costs which cannot be attributed to the contract activity or cannot be allocated to a contract are excluded from the accumulated contract costs. These costs would include:

(a) general administration and selling costs;

(b) research and development costs;

(c) depreciation of idle plant and equipment that is not used on a specific contract.

AC 109 gives guidance as to the correct treatment of the costs incurred in securing the contract (e.g. tendering costs). Generally, only costs attributable to a contract for the period from the date of securing the contract to the completion of the contract may be accumulated in contract costs. Costs incurred in securing the contract may also be included in accumulated contract costs if they can be separately identified and measured reliably and it is probable that the contract will be obtained.

### 7.4.3 Recognition of Losses

AC 109 states that when it is probable that total contract costs will exceed
total contract revenue, the expected loss should be recognised as an expense immediately.

If a provision for loss is required, the amount of such loss is provided for irrespective of:

(a) whether or not work has commenced on the contract;
(b) the stage of completion of contract activity; or
(c) the amount of profits expected to arise on other contracts.

In providing for expected losses on construction contracts, the future income tax benefits that will accrue should be taken into account, subject to there being a reasonable likelihood of future taxable income to offset those losses against.

A practical issue not considered by AC 109 is circumstances where contracts are accepted with anticipated future losses so as to avoid larger losses in future years caused by a sub-optimal use of capacity. It is submitted that if there is sufficient certainty about the avoidance of losses in future years then the losses anticipated in the short term should be attributed to those future periods in proportion to the activities performed, i.e. the losses (or expenses incurred) meet the definition of an asset as the probability of future economic benefits is reasonably assured. Such losses carried forward would have to be fully disclosed.

7.4.4 Claims and Variations

Claims arise in construction contracts where the contractor claims additional compensation above the contract price because of occurrences such as customer caused delays, errors in specifications and designs, and other unforeseen reasons which caused additional costs to the contractor. The contractor seeks to collect from his client or other parties reimbursement for costs not included in the contract price.

Variations are instructions from the contractor’s client for a change in the scope of the work to be performed in terms of the contract. For example, increases or decreases of any proportion of the work under the contract; changes in the quality of any material, equipment or work; varying the contract programme or the order of the work under the contract; execution of any part of the work under the contract outside normal or agreed upon working hours; and the execution of additional work not agreed upon in the terms of the original contract.

The concepts of AC 000 would hold that claims and variations in contract
work should only be recognised to the extent that it is probable they will result in future revenue and the claims or variations are capable of being reliably measured.

According to AC 109, a variable is included in contract revenue when:

(a) it is probable that the customer will approve the variation and the amount of revenue arising from the variation, and

(b) the amount of revenue can be reliably measured.

According to AC 109, claims are only included in contract revenue when:

(a) negotiations have reached an advance stage such that it is probable that the customer will accept the claim, and

(b) the amount that will probably be accepted by the customer, can be measured reliably.

In the example above, if it was demonstrated that the increase in estimated total costs in 1902 was attributable to a claim or variation then the contract price would have increased by a similar (or larger) amount. The income recognised in 1902 would have been based on not only the revised estimate of total costs but also the revised total contract price.

### 7.4.5 Retentions

Retentions are portions of progress billings which are not paid until the satisfaction of conditions specified in the contract for the payment of such amounts or until defects have been rectified.

AC 109 requires separate disclosure of the amount of retentions at the end of an accounting period.

In the above example, debtors of R300 in 1901 and R900 in 1902 may have included retention amounts due of, say, R200 and R800. These would be separately disclosed as retention debtors under current assets in the balance sheet.

### 7.4.6 Contingency Provisions

Contracts sometimes contain provision for rewards or penalties that exceed or fall short of various performance standards. For example, a contract may allow for an additional payment to the contractor for early completion of the contract. Such incentives are more common than penalty provisions for late completion.
Contingent gains and losses are disclosed in accordance with the statement on contingencies and events occurring after the balance sheet date, i.e. AC 107 (refer chapter 18).

7.5 Financial Statement Presentation

7.5.1 Accounting Policy

Paragraph 6 of Schedule 4 to the Companies Act requires disclosure of the accounting policies adopted by a company in determining the carrying amounts of assets and liabilities and the resulting net income. Following are two examples of accounting policy disclosures:

"Revenue from fixed price construction contracts is recognised on the stage of completion method, measured by reference to the percentage of labour hours incurred to date to estimated total labour hours for each contract.

Revenue from cost plus contracts is recognised by reference to the recoverable costs incurred during the period plus the fee earned, measured by the proportion that costs incurred to date bear to the estimated total costs of the contract."

In addition, IAS 11 (revised) gives further examples of possible accounting policy wording for incentives and contract costs:

"Incentives are included in revenue when it is probable that they will be received. An amount equal to contract costs attributable to claims is included in revenue when realisation is probable and the amount can be reliably estimated.

Contract costs include all direct material and labour costs and those indirect costs that are attributable to contract activity, including indirect labour, supplies, repairs and depreciation. Selling, general and administrative costs are recognised as an expense as incurred. Estimated losses on uncompleted contracts are recognised as an expense in the year in which such losses are determined. Changes in job performance, job conditions and estimated profitability, including those arising from contract penalty provisions, and final contract settlements may result in revisions to costs and are recognised in the year in which the costs are incurred."
7.5.2 Companies Act Requirements

In addition to paragraph 6 requiring disclosure of the accounting policy, Schedule 4, paragraph 29(1)(f) requires disclosure of contracts in progress as a specific category of stock. In addition, paragraph 29(2) requires that profits or losses taken into account for contracts in progress be stated as well as the basis on which such profits or losses have been calculated.

7.5.3 Accounting Standards

AC 109 requires disclosure in the financial statements of:

- the amount of contract revenue recognised as revenue in the period;
- the methods used to determine the contract revenue recognised in the period; and
- the methods used to determine the stage of completion of contracts in progress.

The following should be disclosed for contracts in progress at the balance sheet date:

- the aggregate amount of costs incurred and recognised profits (less recognised losses) to date;
- the amount of retentions.

An enterprise should present:

- the gross amount due from customers for contract work as an asset; and
- the gross amount due to customers for contract work as a liability.

The relevant disclosures (AC 109) for the foregoing example on the stage of completion method would be as follows:

**Income statement**

<table>
<thead>
<tr>
<th>Notes</th>
<th>1901</th>
<th>1902</th>
<th>1903</th>
</tr>
</thead>
<tbody>
<tr>
<td>R'000</td>
<td>R'000</td>
<td>R'000</td>
<td></td>
</tr>
<tr>
<td>Gross revenue</td>
<td>4 194</td>
<td>11 161</td>
<td>1 645</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(3 750)</td>
<td>(10 250)</td>
<td>(1 500)</td>
</tr>
<tr>
<td>Gross profit</td>
<td>444</td>
<td>911</td>
<td>145</td>
</tr>
</tbody>
</table>

**Balance sheet**

<table>
<thead>
<tr>
<th>Notes</th>
<th>1901</th>
<th>1902</th>
<th>1903</th>
</tr>
</thead>
<tbody>
<tr>
<td>R'000</td>
<td>R'000</td>
<td>(Contract complete)</td>
<td></td>
</tr>
<tr>
<td>Employment of capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debtors</td>
<td>300</td>
<td>900</td>
<td>–</td>
</tr>
<tr>
<td>Amount due from customers</td>
<td>2</td>
<td>894</td>
<td>955</td>
</tr>
</tbody>
</table>
Notes to the financial statements

1. Accounting policy – Contracts in progress

Contract revenue is recognised on the stage of completion method. The stage of completion is determined on the basis of the proportion of costs incurred for work performed to date, to the estimated total costs of the contract.

2. Amounts due from customers

<table>
<thead>
<tr>
<th></th>
<th>1901</th>
<th>1902</th>
<th>1903</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract costs to date</td>
<td>3 750</td>
<td>14 000</td>
<td>15 500</td>
</tr>
<tr>
<td>Profit recognised to date</td>
<td>444</td>
<td>1 355</td>
<td>1 500</td>
</tr>
<tr>
<td>Progress billings charged</td>
<td>(3 300)</td>
<td>(14 400)</td>
<td>(17 000)</td>
</tr>
</tbody>
</table>

7.6 Taxation

7.6.1 Contract Revenue

In terms of the gross income definition the total amount received by or accrued to a contractor shall be included in gross income. In the case of contractors, therefore, the amount included in gross income would normally be progress billings net of retentions.

Where contract revenue is earned in advance of costs incurred in terms of the contract then a Section 24C allowance may be claimable in respect of future expenditure which will be incurred by the contractor in performing his obligations under the contract.

The allowance granted is calculated on the basis of the budgeted gross profit expected in terms of the contract. The effect of a Section 24C allowance is to effectively increase expenditure to the expected proportion of total revenue against the current year gross income shown for a particular contract. The allowance is then added back in the next period.

Timing differences between accounting and taxable income that arise in respect of the recognition of contract revenue give rise to deferred taxation balances which should be accounted for in the usual way (see chapter 2).

7.6.2 Construction Work-In-Progress

Construction work-in-progress had to be included in a contractor’s closing stock for the first time in years ending on or after 1 January 1991. The value
of construction work-in-progress is determined by Section 22 (3A) of the Income Tax Act. Essentially closing stock is calculated on the basis of costs incurred in terms of generally accepted accounting practice, less progress billings (these billings would include retentions). The costs incurred would exclude costs that are irrecoverable in terms of the contract. Closing stock arises therefore when costs incurred are greater than progress billings in any year of assessment.

The inclusion of construction work-in-progress as closing stock in the taxable income of a contractor is subject to a ten year phasing in provision in terms of Section 22 (3B). The phase in provision allows a deduction of the following percentages of construction work-in-progress included in a taxpayer’s closing stock for the first time in any year of assessment ending on or after 1 January 1991:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>97.5%</td>
<td>95%</td>
<td>90%</td>
<td>85%</td>
<td>75%</td>
<td>65%</td>
<td>50%</td>
<td>35%</td>
<td>20%</td>
</tr>
</tbody>
</table>

For nine years, therefore, after the first inclusion of closing construction work-in-progress in a contractor’s closing stock on or after 1 January 1991, the contractor may deduct the above percentages of that first closing stock in the respective years. The phasing in deduction cannot be more than the value of the closing stock it is deducted from.

Timing differences that arise in respect of the recognition of construction work-in-progress give rise to deferred taxation balances which should be accounted for in the usual way (see chapter 2).