

**“Accounting Standard (AS)
10 Property, Plant and
Equipment**

Scope

- ***This Standard should be applied in accounting for property, plant and equipment except when another Accounting Standard requires a different accounting treatment.***
- This Standard does not apply to:
 - (a) biological assets related to agricultural activity other than bearer plants. This Standard applies to bearer plants but it does not apply to the produce on bearer plants; and
 - (b) wasting assets including mineral rights, expenditure on the exploration for and extraction of minerals, oil, natural gas and similar non-regenerative resources.
- Covered by other Accounting Standards. For example, AS 19, handles assets on Leases
- Investment property, as defined in AS 13.

Definitions

The following terms are used in this Standard with the meanings specified:

Agricultural Activity is the management by an enterprise of the biological transformation and harvest of biological assets for sale or for conversion into agricultural produce or into additional biological assets.

Bearer plant is a plant that

- ***is used in the production or supply of agricultural produce;***
- ***is expected to bear produce for more than a period of twelve months; and***
- ***has a remote likelihood of being sold as agricultural produce, except for incidental scrap sales.***

The following are not bearer plants:

- (i) plants cultivated to be harvested as agricultural produce (for example, trees grown for use as lumber);
- (ii) plants that are cultivated both for their fruit and their lumber and
- (iii) annual crops (for example, maize and wheat).

Incidental scrap sales after their life is over, would not prevent the plant from satisfying the definition of a bearer plant.

Biological Asset is a living animal or plant.

Carrying amount is the amount at which an asset is recognised after deducting any accumulated depreciation and accumulated impairment losses.

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 or, where applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements of other Accounting Standards.

Depreciable amount is the cost of an asset, or other amount substituted for cost, less its residual value. Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life.

Enterprise -specific value is the present value of the cash flows an enterprise expects to arise from the continuing use of an asset and from its disposal at the end of its useful life or expects to incur when settling a liability.

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

An **impairment loss** is the amount by which the carrying amount of an asset exceeds its recoverable amount.

Property, plant and equipment are tangible items that:

- (a) are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes; and
- (b) are expected to be used during more than a period of twelve months.

Recoverable amount is the higher of an asset's net selling price and its value in use.

The **residual value** of an asset is the estimated amount obtained from disposal of the asset, after deducting the estimated costs of disposal, at the end of its useful life.

Useful life is:

- (a) the period over which an asset is expected to be available for use by an enterprise ; or
- (b) the number of production or similar units expected to be obtained from the asset by an enterprise.

Recognition

- **The cost of an item of property, plant and equipment should be recognised as an asset if, and only if:**
 - **it is probable that future economic benefits will flow and**
 - **the cost of the item can be measured reliably.**
- Items such as spare parts, stand-by equipment and servicing equipment are recognised as PPE if they satisfy the definition, Otherwise, such items are classified as inventory.
- An enterprise evaluates under this recognition principle all its costs on property, plant and equipment at the time they are incurred. These costs include costs incurred:
 - initially to acquire or construct an item of property, plant and equipment; and
 - subsequently to add to, replace part of, or service it.

Initial Costs

- The definition of 'property, plant and equipment' covers tangible items which are held for use or for administrative purposes. It would include assets used for selling and distribution, finance and accounting, personnel and other functions of an enterprise.
- Items of property, plant and equipment may also be acquired for safety or environmental reasons.
- The acquisition of some PPE, although not directly increasing the future economic benefits of any particular existing item but if it qualify for recognition as assets because they enable an enterprise to derive future economic benefits from related assets in excess of what could be derived had those items not been acquired.

For example, a chemical manufacturer may install new chemical handling processes to comply with environmental requirements for the production and storage of dangerous chemicals; related plant enhancements are recognised as an asset because without them the enterprise is unable to manufacture and sell chemicals.

Subsequent Costs

- Day-to-day servicing of the items are recognised in the statement of profit and loss as incurred and not in carrying amount.
- Parts of some items of PPE may require replacement at regular intervals. For example, a relining of furnace or aircraft interiors, parts of conveyor system, such as, conveyor belts, wire ropes, etc., The cost is added to carrying amount if the recognition criteria are met.
- Regular major inspections for faults cost is recognised in the carrying amount of the item of PPE as a replacement if the recognition criteria are satisfied. Any remaining carrying amount of the cost of the previous inspection (as distinct from physical parts) is derecognised.
- The derecognition of the carrying amount as stated in paragraphs 13-14 occurs regardless of whether the cost of the previous part / inspection was identified in the transaction in which the item was acquired or constructed. If it is not practicable for an enterprise to determine the carrying amount of the replaced part/ inspection, it may use the cost of the replacement or the estimated cost of a future similar inspection as an indication of what the cost of the replaced part/ existing inspection component was when the item was acquired or constructed.

Measurement at Recognition

- ***An item of PPE that qualifies for recognition as an asset should be measured at its cost.***

Elements of Cost

- The cost of an item of PPE comprises:
 - its purchase price, including import duties and non –refundable purchase taxes, after deducting trade discounts and rebates.
 - any costs directly attributable to bringing the asset to the location and condition.
 - the costs of dismantling, removing the item and restoring the site
- Examples of directly attributable costs are:
 - costs of employee benefits (as defined in AS 15, Employee Benefits) arising directly from the construction or acquisition of the item of property, plant and equipment;
 - costs of site preparation;
 - initial delivery and handling costs;
 - installation and assembly costs;
 - costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition and
 - professional fees.
- Examples of costs that are not costs of an item of PPE are:
 - costs of opening a new facility or business, such as, inauguration costs;
 - costs of introducing a new product or service(including costs of advertising)
 - costs of conducting business in a new location or with a new class of customer (including costs of staff training); and
 - administration and other general overhead costs.
- Costs incurred in using or redeploying an item are not included in the carrying amount of that item. For example, the following costs are not included in the carrying amount of an item of property, plant and equipment:
 - costs incurred while an item capable of operating in the manner intended by management has yet to be brought into use or is operated at less than full capacity;
 - initial operating losses, such as those incurred while demand for the output of an item builds up;and
 - costs of relocating or reorganising part or all of the operations of an enterprise.
- The income and related expenses of incidental operations are recognised in the statement of profit and loss and included in their respective classifications of income and expense. For example, income may be earned through using a building site as a car park until construction

starts.

- The cost of a **self-constructed asset** is determined using the same principles as for an acquired asset.
 - Any internal profits are eliminated in arriving at such costs.
 - The cost of abnormal amounts of wasted material, labour, or other resources is not included in the cost of the asset.
 - AS 16, Borrowing Costs, establishes criteria for the recognition of interest as a component of the carrying amount of a self-constructed PPE.
- Bearer plants are accounted for in the same way as self-constructed items of PPE before they are in the location and condition necessary to be capable of operating in the manner intended by management.

Measurement of Cost

- The cost of an item of PPE is the cash price equivalent .
- If payment is deferred beyond normal credit terms, the difference between the cash price equivalent and the total payment is recognised as interest over the period of credit unless such interest is capitalised in accordance with AS 16.
- IF there is an **exchange of one non-monetary asset for another** or combination
 - The cost of such an item of PPE is measured at fair value
 - If the acquired item is not measured at fair value, its cost is measured at the carrying amount of the asset given up.
 - Exception if (a) the exchange transaction lacks commercial substance or
(b) the fair value of neither the asset(s) received nor the asset(s) given up is reliably measurable.

An exchange transaction has **commercial substance** if:

- the configuration (risk, timing and amount) of the cash flows of the asset received differs from the configuration of the cash flows of the asset transferred; or
 - the enterprise-specific value of the portion of the operations of the enterprise affected by the transaction changes as a result of the exchange;
 - and the difference in (a) or (b) is significant relative to the fair value of the assets exchanged.
- The fair value of an asset is reliably measurable if
 - (a) the variability fair value measurements is not significant for that asset or
 - (b) the probabilities of the various estimates can be reasonably assessed
 - Where several items of PPE are purchased for a consolidated price, the consideration is apportioned on the basis of their respective fair values. In case the fair values of the items cannot be measured reliably, these values are estimated on a fair basis of competent valuers.
 - The cost of an item of PPE held by a lessee under a finance lease is determined in accordance with AS 19, Leases.
 - The carrying amount of an item of PPE may be reduced by government grants in accordance with AS 12, Accounting for Government Grants.

Measurement after Recognition

- *An enterprise should choose either the **cost model** or the **revaluation model** as its accounting policy and should apply that policy to an entire class of property, plant and equipment.*

Cost Model

- An item of PPE should be carried at its cost less accumulated depreciation and accumulated impairment losses.

Revaluation Model

- An item of PPE whose fair value can be measured reliably should be carried at a revalued amount, being its fair value at the date of the revaluation less subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations should be made with sufficient regularity.
- The fair value of PPE is determined from market-based evidence and professionally qualified valuers.
- If there is no market-based evidence of fair value, an enterprise may need to estimate fair value using an income approach (for example, based on discounted cash flow projections) or a depreciated replacement cost approach which aims at making a realistic estimate of the current cost of acquiring or constructing an item that has the same service potential as the existing item.
- The frequency of revaluations depends upon the changes in fair values. When the fair value of a revalued asset differs materially from its carrying amount, a further revaluation is required.
- Some items of PPE experience volatile changes in fair value, thus necessitating annual revaluation. Others can have revaluations in only every three or five years.
- When an item of PPE is revalued, the carrying amount is adjusted to the revalued amount. At the date of the revaluation, the asset is treated in one of the following ways:
 - the gross carrying amount may be restated by reference to observable market data or it may be restated proportionately to the change in the carrying amount. The accumulated depreciation is adjusted to equal the difference between the gross carrying amount and the carrying amount of the asset after taking into account accumulated impairment losses; or
 - the accumulated depreciation is eliminated against the gross carrying amount of the asset.
- ***If an item of PPE is revalued, the entire class of PPE to which that asset belongs should be revalued.***
- A class of PPE is a grouping of assets of a similar nature and use in operations of an enterprise. The following are examples of separate classes:
 - land;
 - land and buildings;
 - machinery;
 - ships;
 - aircraft;
 - motor vehicles;
 - furniture and fixtures;
 - office equipment; and
 - bearer plants.
- An increase on revaluation should be credited to revaluation surplus. However, the increase should be recognised in the statement of profit and loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in the statement of profit and loss.
- A decrease should be charged to the statement of profit and loss. However, the decrease should be debited directly to owners' interests under the heading of revaluation surplus to the extent of any credit balance existing in the revaluation surplus in respect of that asset.
- The revaluation surplus in respect of an item of PPE may be transferred to the revenue reserves when the asset is retired or disposed of.

Depreciation

- ***Each part of an item of PPE with a cost that is significant in relation to the total cost of the item should be depreciated separately.***
- An enterprise allocates the amount initially recognised in respect of an item of PPE to its significant parts and depreciates each such part separately. For example, it may be appropriate to

depreciate separately the airframe and engines of an aircraft.

- If one part has same life and depreciation method, such parts may be grouped.
- An enterprise may choose to depreciate separately the parts of an item that do not have a cost that is significant in relation to the total cost of the item.
- ***The depreciation charge for each period should be recognised in the statement of profit and loss unless it is included in the carrying amount of another asset.***
- The depreciation charge for a period is usually recognised in the statement of profit and loss.
- Sometimes, the future economic benefits embodied in an asset are absorbed in producing other assets. In this case, the depreciation becomes part of the cost of the other asset and is included in its carrying amount. E.g. the depreciation of PPE used for development activities may be included in the cost of an intangible asset

Depreciable Amount and Depreciation Period

- *The depreciation should be allocated on a systematic basis over its useful life.*
- *The residual value and the useful life of an asset should be reviewed at each financial year-end and, if expectations differ from previous estimates, the change(s) should be accounted for as a change in an accounting estimate in accordance with AS 5*
- Depreciation is recognised even if the fair value of the asset exceeds its carrying amount, as long as the asset's residual value does not exceed its carrying amount.
- The depreciable amount of an asset is determined after deducting its residual value.
- Depreciation will be zero if the residual value is equal to or greater than its carrying amount.
- Depreciation of an asset begins when it is available for use,
- Depreciation of an asset ceases when the asset is retired and is held for disposal and the date that the asset is derecognised, whichever is earlier.
- However, under usage methods of depreciation, the depreciation charge can be zero while there is no production.
- The following factors are considered in determining the useful life of an asset:
 - expected usage of the asset. Usage is assessed by reference to the expected capacity or physical output of the asset.
 - expected physical wear and tear, which depends on operational factors such as the number of shifts for which the asset is to be used and the repair and maintenance programme, and the care and maintenance of the asset while idle.
 - technical or commercial obsolescence arising from changes or improvements in production, or from a change in the market demand for the product or service output of the asset.
 - legal or similar limits on the use of the assets.
- Land and buildings are separable assets and are accounted for separately, even when they are acquired together. Usually, land has an unlimited useful life and therefore is not depreciated. Buildings have a limited useful life and therefore are depreciable assets.
- In some cases, the land itself may have a limited useful life, in which case it is depreciated in a manner that reflects the benefits to be derived from it.

Depreciation Method

- *The depreciation method used should reflect the pattern in which the future economic benefits of the asset are expected to be consumed by the enterprise.*
- *The depreciation method applied to an asset should be reviewed at each financial year-end and, if there has been a significant change, the method should be changed to reflect the changed pattern. Such a change should be accounted for as a change in an accounting estimate in accordance with AS 5.*
- These methods include

- the straight-line method,
- the diminishing balance method and
- the units of production method.
 - ✓ Straight-line depreciation results in a constant charge over the useful life if the residual value of the asset does not change.
 - ✓ The diminishing balance method results in a decreasing charge over the useful life.
 - ✓ The units of production method results in a charge based on the expected use or output.

The method is applied consistently from period to period unless there is a change in the expected pattern of consumption of those future economic benefits or that the method is changed in accordance with the statute to best reflect the way the asset is consumed.

Changes in Existing Decommissioning, Restoration and Other Liabilities

- *The cost of PPE may undergo changes due to changes in liabilities, price adjustments, changes in duties, changes in initial estimates of amounts provided for dismantling, removing, restoration and similar factors.*
- *If the related asset is measured using the cost model:*
 - *subject to (b), changes in the liability should be added to, or deducted from, the cost of the related asset in the current period.*
 - *the amount deducted from the cost of the asset should not exceed its carrying amount. If a decrease in the liability exceeds the carrying amount of the asset, the excess should be recognised immediately in the statement of profit and loss.*
- *If the related asset is measured using the revaluation model:*
 - *changes in the liability alter the revaluation surplus or deficit previously recognised on that asset, so that:*
 - *a decrease in the liability should (subject to (b)) be credited directly to revaluation surplus, except that it should be recognised in the statement of profit and loss to the extent that it reverses a revaluation deficit on the asset that was previously recognised in the statement of profit and loss;*
 - *an increase in the liability should be recognised in the statement of profit and loss, except that it should be debited directly to revaluation surplus to the extent of any credit balance existing in the revaluation surplus in respect of that asset.*
 - *in the event that a decrease in the liability exceeds the carrying amount that would have been recognised had the asset been carried under the cost model, the excess should be recognised immediately in the statement of profit and loss.*
- *The adjusted depreciable amount of the asset is depreciated over its useful life. Therefore, once the related asset has reached the end of its useful life, all subsequent changes in the liability should be recognised in the statement of profit and loss as they occur. This applies under both the cost model and the revaluation model.*

Impairment

- To determine whether an item of PPE is impaired, an enterprise applies AS 28, Impairment of Assets. AS 28

Compensation for Impairment

- impairments of items of PPE are recognised in accordance with AS 28;
- derecognition of items of PPE retired or disposed of is determined in accordance with this Standard;
- compensation from third parties for items of PPE that were impaired, lost or given up is included in determining profit or loss when it becomes receivable; and
- the cost of items of PPE restored, purchased or constructed as replacements is determined

in accordance with this Standard.

Retirements

- *Items of PPE retired from active use and held for disposal should be stated at the lower of their carrying amount and net realisable value. Any write-down in this regard should be recognised immediately in the statement of profit and loss.*

Derecognition

- *The carrying amount of an item of PPE should be derecognised*
 - *on disposal; or*
 - *when no future economic benefits are expected from its use or disposal.*
- *The gain or loss arising from the derecognition of an item of PPE should be included in the statement of profit and loss when the item is derecognised (unless AS 19, Leases, requires otherwise on a sale and leaseback). Gains should not be classified as revenue, as defined in AS 9, Revenue Recognition.*
- *However, an enterprise that in the course of its ordinary activities, routinely sells items of PPE that it had held for rental to others should transfer such assets to inventories at their carrying amount when they cease to be rented and become held for sale. The proceeds from the sale of such assets should be recognised in revenue in accordance with AS 9, Revenue Recognition.*
- The disposal of an item of PPE may occur in a variety of ways (e.g. by sale, by entering into a finance lease or by donation). In determining the date of disposal of an item, an enterprise applies the criteria in AS 9 for recognising revenue from the sale of goods. AS 19, Leases, applies to disposal by a sale and leaseback.
- If, under the recognition principle in paragraph 7, an enterprise recognises in the carrying amount of an item of PPE the cost of a replacement for part of the item, then it derecognises the carrying amount of the replaced part regardless of whether the replaced part had been depreciated separately. If it is not practicable for an enterprise to determine the carrying amount of the replaced part, it may use the cost of the replacement as an indication of what the cost of the replaced part was at the time it was acquired or constructed.
- ***The gain or loss arising from the derecognition of an item of PPE should be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.***
- The consideration receivable on disposal of an item of PPE is recognised in accordance with the principles enunciated in AS 9.

Disclosure

- The financial statements should disclose, for each class of property, plant and equipment:
 - the measurement bases (i.e., cost model or revaluation model)
 - the depreciation methods used;
 - the useful lives or the depreciation rates used. In case the useful lives or the depreciation rates used are different from those specified in the statute governing the enterprise, it should make a specific mention of that fact;
 - the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) and
 - a reconciliation of the carrying amount at the beginning and end of the period showing:
 - additions;
 - assets retired from active use and held for disposal;
 - acquisitions through business combinations ;
 - increases or decreases resulting from revaluations
 - impairment losses recognised in the statement of profit and loss
 - impairment losses reversed in the statement of profit and loss in accordance with

AS 28;

- depreciation;
- the net exchange differences arising on the translation of the financial statements of a non-integral foreign operation in accordance with AS 11, The Effects of Changes in Foreign Exchange Rates; and

➤ The financial statements should also disclose:

- the existence and amounts of restrictions on title, and PPE pledged as security for liabilities;
- the amount of expenditure recognised in the carrying amount of an item of PPE in the course of its construction;
- the amount of contractual commitments for the acquisition of property, plant and equipment;
- if it is not disclosed separately on the face of the statement of profit and loss, the amount of compensation from third parties for items of PPE that were impaired, lost or given up that is included in the statement of profit and loss; and
- the amount of assets retired from active use and held for disposal.

➤ Selection of the depreciation method and estimation of the useful life of assets are matters of judgement. Therefore, disclosure of the methods adopted and the estimated useful lives or depreciation rates provides users of financial statements with information that allows them to review the policies selected by management and enables comparisons to be made with other enterprises. For similar reasons, it is necessary to disclose:

- depreciation, whether recognised in the statement of profit and loss or as a part of the cost of other assets, during a period; and
 - accumulated depreciation at the end of the period.

➤ In accordance with AS 5, an enterprise discloses the nature and effect of a change in an accounting estimate that has an effect in the current period or is expected to have an effect in subsequent periods. For property, plant and equipment, such disclosure may arise from changes in estimates with respect to:

- residual values;
- the estimated costs of dismantling, removing or restoring items of property, plant and equipment;
- useful lives; and
- depreciation methods.

➤ *If items of PPE are stated at revalued amounts, the following should be disclosed:*

- *the effective date of the revaluation;*
 - *whether an independent valuer was involved;*
 - *the methods and significant assumptions applied in estimating fair values of the items;*
- *the extent to which fair values of the items were determined directly by reference to observable prices in an active market or recent market transactions on arm's length terms or were estimated using other valuation techniques; and*
- *the revaluation surplus, indicating the change for the period and any restrictions on the distribution of the balance to shareholders.*

➤ An enterprise is encouraged to disclose the following:

- the carrying amount of temporarily idle property, plant and equipment;
 - the gross carrying amount of any fully depreciated PPE that is still in use;
- for each revalued class of property, plant and equipment, the carrying amount that would have been recognised had the assets been carried under the cost model;
- the carrying amount of PPE retired from active use and not held for disposal.

