IAS 16
PROPERTY, PLANT AND EQUIPMENT

Doç. Dr.Nazlı Kepçe

Objective

- to prescribe the accounting treatment for property, plant and equipment so that users of the financial statements can discern information about an entity's investment in its property, plant and equipment and the changes in such investment.

The principal issues in accounting for property, plant and equipment are

- the recognition of the assets,
- the determination of their carrying amounts and the depreciation charges and
- impairment losses to be recognized in relation to them.

Scope (1/3)

- This Standard shall be applied in accounting for property, plant and equipment except when another Standard requires or permits a different accounting treatment.

Scope (2/3)

- This Standard does not apply to:
  (a) property, plant and equipment classified as held for sale in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations;*
  (b) biological assets related to agricultural activity (see IAS 41 *Agriculture);*
  (c) the recognition and measurement of exploration and evaluation assets (see IFRS 6 *Exploration for and Evaluation of Mineral Resources); or*
  (d) mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources.

- However, this Standard applies to property, plant and equipment used to develop or maintain the assets described in (b)–(d).

Scope (3/3)

- An entity using the cost model for investment property in accordance with IAS 40 *Investment Property shall use the cost model in this Standard.*

Recognition (1/3)

- The cost of an item of property, plant and equipment shall be recognized as an asset if, and only if:

  (a) it is probable that future economic benefits associated with the item will flow to the entity; and

  (b) the cost of the item can be measured reliably.

Recognition (2/3)

- Items such as spare parts, stand-by equipment and servicing equipment are recognized in accordance with this IFRS when they meet the definition of property, plant and equipment. Otherwise, such items are classified as inventory.

Recognition (3/3)

- An entity evaluates under this recognition principle all its property, plant and equipment costs at the time they are incurred. These costs include
  - costs incurred initially to acquire or construct an item of property, plant and
  - equipment and costs incurred subsequently to add to, replace part of, or service it.

Initial costs

- Items of property, plant and equipment may be acquired for safety or environmental reasons. The acquisition of such property, plant and equipment, although not directly increasing the future economic benefits of any particular existing item of property, plant and equipment, may be necessary for an entity to obtain the future economic benefits from its other assets.
- Such items of property, plant and equipment qualify for recognition as assets because they enable an entity to derive future economic benefits from related assets in excess of what could be derived had those items not been acquired.

Subsequent costs (1/5)

- Under the recognition principle an entity does not recognize in the carrying amount of an item of property, plant and equipment the costs of the day-to-day servicing of the item. Rather, these costs are recognized in profit or loss as incurred.

Subsequent costs (2/5)

- ***Costs of day-to-day servicing*** are primarily the costs of labor and consumables, and may include the cost of small parts. The purpose of these expenditures is often described as for the ***'repairs and maintenance'*** of the item of property, plant and equipment.

Subsequent costs (3/5)

- Parts of some items of property, plant and equipment may require replacement at regular intervals.
- Items of property, plant and equipment may also be acquired to make a less frequently recurring replacement, such as replacing the interior walls of a building, or to make a nonrecurring replacement. Under the recognition principle an entity recognizes in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if the recognition criteria are met

Subsequent costs (4/5)

- Items of property, plant and equipment may also be acquired to make a less frequently recurring replacement.
- Under the recognition principle an entity recognizes in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if the recognition criteria are met.

Subsequent costs (5/5)

- A condition of continuing to operate an item of property, plant and equipment (for example, an aircraft) may be performing regular major inspections for faults regardless of whether parts of the item are replaced.
- When each major inspection is performed, its cost is recognized in the carrying amount of the item of property, plant and equipment as a replacement if the recognition criteria are satisfied.

Measurement at recognition (1/5)

- An item of property, plant and equipment that qualifies for recognition as an asset shall be measured at its cost**.**

Measurement at recognition (2/5)

- The cost of an item of property, plant and equipment comprises:

  (a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.

  (b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

  (c) the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period.

Measurement at recognition (3/5)

- Examples of directly attributable costs are:

  (a) costs of employee benefits (as defined in IAS 19 *Employee Benefits) arising* directly from the construction or acquisition of the item of property, plant and equipment;

  (b) costs of site preparation;

  (c) initial delivery and handling costs;

  (d) installation and assembly costs;

Measurement at recognition (4/5)

(e) 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 (such as samples produced when testing equipment); and

(f)professional fees.

Measurement at recognition (5/5)

- Examples of costs that are not costs of an item of property, plant and equipment are:

  (a) costs of opening a new facility;

  (b) costs of introducing a new product or service (including costs of advertising and promotional activities);

  (c) costs of conducting business in a new location or with a new class of customer (including costs of staff training); and

  (d) administration and other general overhead costs.

Measurement of cost (1/6)

- The cost of an item of property, plant and equipment is the cash price equivalent at the recognition date.
- If payment is deferred beyond normal credit terms, the difference between the cash price equivalent and the total payment is recognized as interest over the period of credit unless such interest is capitalized in accordance with IAS 23.

Measurement of cost (2/6)

- One or more items of property, plant and equipment may be acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets.

Measurement of cost (3/6)

- The cost of such an item of property, plant and equipment is measured at fair value unless

  (a) the exchange transaction lacks commercial substance or

  (b) the fair value of neither the asset received nor the asset given up is reliably measurable. The acquired item is measured in this way even if an entity cannot immediately derecognize the asset given up. If the acquired item is not measured at fair value, its cost is measured at the carrying amount of the asset given up.

Measurement of cost (4/6)

- An exchange transaction has commercial substance if:

  (a) 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

  (b) the entity-specific value of the portion of the entity's operations affected by the transaction changes as a result of the exchange; and

  (c) the difference in (a) or (b) is significant relative to the fair value of the assets exchanged.

Measurement of cost (5/6)

- The cost of an item of property, plant and equipment held by a lessee under a finance lease is determined in accordance with IAS 17.

Measurement of cost (6/6)

- The carrying amount of an item of property, plant and equipment may be reduced by government grants in accordance with IAS 20 *Accounting for Government Grants and Disclosure of Government Assistance.*

Measurement after recognition (1/9)

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

Measurement after recognition (2/9)

- **Cost model;**

  after recognition as an asset, an item of property, plant and equipment shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.

Measurement after recognition (3/9)

- **Revaluation model**
- After recognition as an asset, an item of property, plant and equipment whose fair value can be measured reliably shall be carried at a revalued amount, being its fair value at the date of the revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses.
- Revaluations shall be made with sufficient regularity to ensure that the carrying amount does not differ materially from that which would be determined using fair value at the end of the reporting period.

Measurement after recognition (4/9)

- When an item of property, plant and equipment is revalued, the carrying amount of that asset is adjusted to the revalued amount. At the date of the revaluation, the asset is treated in one of the following ways:

Measurement after recognition (5/9)

- If an item of property, plant and equipment is revalued, the entire class of property, plant and equipment to which that asset belongs shall be revalued.

Measurement after recognition (6/9)

- If an asset's carrying amount is increased as a result of a revaluation, the increase shall be recognized in other comprehensive income and accumulated in equity under the heading of revaluation surplus.
- However, the increase shall be recognized in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognized in profit or loss.

Measurement after recognition (7/9)

- If an asset's carrying amount is decreased as a result of a revaluation, the decrease shall be recognized in profit or loss.
- However, the decrease shall be recognized in other comprehensive income to the extent of any credit balance existing in the revaluation surplus in respect of that asset.
- The decrease recognized in other comprehensive income reduces the amount accumulated in equity under the heading of revaluation surplus.

Measurement after recognition (8/9)

- The revaluation surplus included in equity in respect of an item of property, plant and equipment may be transferred directly to retained earnings when the asset is derecognized. This may involve transferring the whole of the surplus when the asset is retired or disposed of.
- However, some of the surplus may be transferred as the asset is used by an entity. In such a case, the amount of the surplus transferred would be the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost. Transfers from revaluation surplus to retained earnings are not made through profit or loss.

Measurement after recognition (9/9)

- The effects of taxes on income, if any, resulting from the revaluation of property, plant and equipment are recognized and disclosed in accordance with IAS 12 *Income Taxes.*

Depreciation (1/9)

- Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item shall be depreciated **separately**

Depreciation (2/9)

- The depreciation charge for each period shall be recognized in profit or loss unless it is included in the carrying amount of another asset.

Depreciation (3/9)

- The depreciation charge for a period is usually recognized in profit or loss. However, sometimes, the future economic benefits embodied in an asset are absorbed in producing other assets. In this case, the depreciation charge constitutes part of the cost of the other asset and is included in its carrying amount.
- For example, the depreciation of manufacturing plant and equipment is included in the costs of conversion of inventories (see IAS 2).

Depreciation (4/9)

- The depreciable amount of an asset shall be allocated on a systematic basis over its useful life.
- The residual value and the useful life of an asset shall be reviewed at least at each financial year-end and, if expectations differ from previous estimates, the change(s) shall be accounted for as a change in an accounting estimate in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors.*

Depreciation (5/9)

- Depreciation is recognized 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.
- Repair and maintenance of an asset do not negate the need to depreciate it.

Depreciation (6/9)

- Depreciation of an asset begins when it is available for use, ie when it is in the location and condition necessary for it to be capable of operating in the manner intended by management.

Depreciation (7/9)

- The depreciation method used shall reflect the pattern in which the asset's future economic benefits are expected to be consumed by the entity.

Depreciation (8/9)

- The depreciation method applied to an asset shall be reviewed at least at each financial year-end and, if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the method shall be changed to reflect the changed pattern. Such a change shall be accounted for as a change in an accounting estimate in accordance with IAS 8.

Depreciation (9/9)

- A variety of depreciation methods can be used to allocate the depreciable amount of an asset on a systematic basis over its useful life. These methods include;
  - the straight-line method,
  - the diminishing balance method and
  - the unitsof production method.

Impairment

- To determine whether an item of property, plant and equipment is impaired, an entity applies IAS 36 *Impairment of Assets.*

Compensation for impairment

- Compensation from third parties for items of property, plant and equipment that were impaired, lost or given up shall be included in profit or loss when the compensation becomes receivable.

Derecognition (1/3)

- The carrying amount of an item of property, plant and equipment shall be derecognized:

  (a) on disposal; or

  (b) when no future economic benefits are expected from its use or disposal.

Derecognition (2/3)

- The gain or loss arising from the derecognition of an item of property, plant and equipment shall be included in profit or loss when the item is derecognised (unless IAS 17 requires otherwise on a sale and leaseback). Gains shall not be classified as revenue.

Derecognition (3/3)

- The gain or loss arising from the derecognition of an item of property, plant and equipment shall be determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

Disclosure (1/3)

- The financial statements shall disclose, for each class of property, plant and equipment:

  (a) the measurement bases used for determining the gross carrying amount;

  (b) the depreciation methods used;

  (c) the useful lives or the depreciation rates used;

  (d) the gross carrying amount and the accumulated depreciation (aggregated with accumulated impairment losses) at the beginning and end of the period; and

  (e) a reconciliation of the carrying amount at the beginning and end of the period showing:
  - (i) additions;
  - (ii) assets classified as held for sale or included in a disposal group classified as held for sale in accordance with IFRS 5 and other disposals;
  - (iii) acquisitions through business combinations

Disclosure (2/3)

- (iv) increases or decreases resulting from revaluations under paragraphs 31, 39 and 40 and from impairment losses recognized or reversed in other comprehensive income in accordance with IAS 36;
- (v) impairment losses recognized in profit or loss in accordance with IAS 36;
- (vi) impairment losses reversed in profit or loss in accordance with IAS 36;
- (vii) depreciation;
- (viii) the net exchange differences arising on the translation of the financial statements from the functional currency into a different presentation currency, including the translation of a foreign operation into the presentation currency of the reporting entity; and
- (ix) other changes.

Disclosure (3/3)

- The financial statements shall also disclose:
  - (a) the existence and amounts of restrictions on title, and property, plant and equipment pledged as security for liabilities;
  - (b) the amount of expenditures recognized in the carrying amount of an item of property, plant and equipment in the course of its construction;
  - (c) the amount of contractual commitments for the acquisition of property, plant and equipment; and
  - (d) if it is not disclosed separately in the statement of comprehensive income, the amount of compensation from third parties for items of property, plant and equipment that were impaired, lost or given up that is included in profit or loss.