

IND AS 16-PROPERTY, PLANT AND EQUIPMENT

1. **Meaning:** PPE 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 one period.

Tangible items have physical substance.

2. **Recognition:** PPE shall be recognised 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.

3. **Recognition Amount of PPE:** PPE shall be recognized at two stages

- (a) Initial Recognition
- (b) Subsequent Recognition

4. **Initial recognition of PPE:** Initially all PPE shall be recognized at cost price either it is being acquired /purchase or self-generated.

Notes:

(i) Any expenses/cost incurred in relation to PPE shall be capitalized if such expenditure is necessary to bring the asset to the location and condition and it to be capable of operating in the manner as intended by the management;

(ii) Cost includes following:

- (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 e.g. Employee benefits cost arising directly from construction or acquisition of PPE, Cost of Site Preparation, initial delivery and handling costs, installation and assembly costs, Professional Fees, Costs of testing/trial run (reduce by any sale of scrap from trial run) etc.
- (c) allocable cost
- (d) the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. Such amount shall be recorded at PV.

(iii) Cost does not include

- (a) administrative and general overhead
- (b) Costs incurred in introducing a new product or service
- (c) cost of opening a new facility or inauguration cost of new business
- (d) Cost of conducting business in a new location
- (e) Abnormal loss or operating loss.
- (f) Free sample distribution of product.

Note: A clarification has been added in IND AS 16 that

- The cost of testing (net of sales proceeds, if any) shall be added in the cost of PPE.
- Further, excess of net proceeds from sale of items produced during testing will not be credited to Profit or loss i.e. it will be deducted from the cost of an item of PPE.

- (iv) Borrowing cost shall be treated as per the provisions of Ind AS 23.
- (v) Cost does not include any imputed cost / notional profit.
 Ex 1. Installment cost of the machinery in the market is Rs. 2,000 whereas actual cost incurred by X Ltd on installing Machine is Rs. 1,500. In this case installation cost is capitalized by Rs. 1,500.
 Ex. 2 X Ltd issue an instrument from selling dept. to constructed dept for Rs. 11, 000 whereas actual cost is Rs. 10,000. In this case amount is capitalized by Rs. 10,000
- (vi) Any cost incurred on PPE after it is ready to use should not be capitalized.
- (vii) Any expenses incurred or any income earned during construction shall not be capitalized or decapitalized if such income or expenses are not related to constructed asset.
- (viii) Decommissioning restoration and other liabilities(DROL)/Cost of dismantling, removal and site restoration: If any DROL is aimed at the time of disposal of assets then provisions of such cost shall be capitalized at its present value. [The periodic unwinding of the discount shall be recognised in profit or loss as a finance cost, as it occurs. Capitalisation under Ind AS 23 is not permitted.]

Issue 1: Discount rate for calculation of PV of provision for DROL:- Current market-based discount rate as defined in paragraph 47 of Ind AS 37 (this includes changes in the time value of money and the risks specific to the liability);

Issue 2: In case expected disposal cost of asset is not estimated then calculate expected disposal cost by using current disposal cost and inflation factor.

- (ix) **Deferred Payment:** In case any payment is deferred then difference between actual amount paid and cash price shall be recognized as interest amount. Such interest expenses shall be treated as per Ind AS 23.

E.g. X Ltd purchased an equipment for Rs. 30,000 on a credit of 12 month whereas cash price is Rs. 28,000. Pass JE for acquisition Equipment.

Solution: Journal entry

1. On the date of purchase of Equipment

Equipment A/c	Dr	28,000	
To payable A/c			28,000

2. After 12 months/On the date of payment

Payable A/c	Dr	28,000	
Interest exp A/c	Dr	2,000	
To Bank A/c			30,000

Note: If there is a time gap between two payments is more than one year then IRR shall be calculated for the purpose of recording Interest Expenses.

- (x) **Calculation of cost price if assets are acquired in combined manner :** In such case cost of each asset shall be calculated in the ratio of their fair value

Example: X Ltd purchased four plant and machinery for Rs. 10,000. Calculate cost price of each machine if the fair values of machineries are given below

Name of Machinery	Fair Value (Rs.)
A	1,500
B	2,500
C	3,500
D	5,000
Total	12,500

Solution: Calculation of cost price of each machinery.

Name of Machinery	Cost Price (Rs.)
A	$(10,000/12500) \times 1,500 = \text{Rs. } 1,200$
B	$(10,000/12500) \times 2,500 = \text{Rs. } 2,000$
C	$(10,000/12500) \times 3,500 = \text{Rs. } 2,800$
D	$(10,000/12500) \times 5,000 = \text{Rs. } 4,000$

(xi) Treatment of discount received on PPE

(a) Trade Discount: **Reduce from cost of PPE.**

(b) Settlement Discount: **Considered as other income (As followed by ICAI)**

(xii) Sometimes PPE may be acquired in an exchange for a non-monetary asset or a combination of monetary and non-monetary;

The cost of such an item of PPE is measured at fair value only if:

(a) the exchange transaction have commercial substance; and

(b) the fair value of either the asset received or the asset given up is reliably measurable.

*1 Identification of commercial substance: An exchange transaction has commercial substance if:

(a) the configuration (risk, timing & 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.

*2 In case transaction has commercial substance and fair value of both the asset given up and asset obtained are reliably measured then acquired PPE shall be valued at fair value of asset surrendered. However, if fair value of acquired PPE is more reliably measured then acquired PPE shall be recorded at its fair value.

*3 In case none of conditions is fulfilled then acquired PPE shall be recorded at book value of asset surrendered.

*4 In case any consideration paid or received in cash then such consideration shall be adjusted.

*5 Any difference between PPE recorded and de-capitalization of PPE shall be transfer into P&L A/c.

*6 In case question is silent whether transaction has commercial substance or not always assume transaction have commercial substance.

5. Subsequent recognition of PPE: There are 2 models used for subsequent recognition of PPE

(a) Cost Model

(b) Revaluation model

Entity can use any one model as its accounting policy on the basis of class of asset.

6. Cost model under subsequent recognition: Under cost model asset shall subsequently recorded at historical cost as reduced by Accumulated Depreciation and Impairment loss as per Ind AS 36.

7. Revaluation model under subsequent recognition: Under revaluation model asset shall be shown at fair value at the date of revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

Following points are relevant:-

- (i) In case entity follow revaluation model then it should be on the basis of class of asset.
- (ii) A class of PPE is a grouping of assets of a similar nature and use in an entity's operations. The following are examples of separate classes:
 - (a) Land (b) Land and Buildings (c) Machinery
 - (d) Ships (e) Aircraft (f) Motor Vehicles
 - (g) Furniture and Fixtures (h) Office Equipment (i) Bearer Plants
- (iii) If entity follows revaluation model, it shall be shown as its accounting policy.
- (iv) Frequency of Revaluation
 - Case-1 If items of PPE is significant and volatile changes in fair value : Annually
 - Case-2 In any other cases: 3 to 5 years
- (vii) How to calculate Fair Value:
 - First priority: Market based evidence i.e. value calculated by a qualified professional.
 - If Market based evidence is not available: By using expected benefits either in the way of income or cash flow

(v) Treatment of revaluation surplus or deficit arising on revaluation :

First time revaluation	Gain	Transfer into RR(OCI)	
	Loss	Transfer into P & L A/c	
Subsequently Revaluation	Gain	Earlier Gain	Transfer into RR(OCI)
		Earlier Loss	To the extent earlier loss gain shall be credited into P&L A/c and balance transfer into RR(OCI)
	Loss	Earlier Gain	Adjust with RR(OCI) as appeared in Balance Sheet, balance charged into P&L A/c
		Earlier Loss	Transfer into P & L A/c

Note: The revaluation surplus included in equity in respect of an item of PPE may be transferred directly to retained earnings when the asset is derecognized.

(vi) Accounting treatment of revaluating reserve: There are 2 alternative

Alternative 1: Depreciation elimination approach

- (a) Accumulated depreciation A/c Dr. (At B.V.) XXX
 TO PPE A/c XXX
- &
- (b) PPE A/c Dr. XXX
 To revaluation reserve A/c (With revaluation amount) XXX

Alternative 2: Restatement approach: Following steps are followed

Step 1: Calculate revaluation surplus by comparing Book value with fair value of PPE.

Step 2: Calculate % of revaluation surplus, in comparison with the book value of PPE.

Step 3: Pass Journal entry.

- PPE A/c (At cost x % of surplus) Dr. XXX
- To Accumulated depreciation A/c (At BV X %of surplus) XXX
- To Revaluation Reserve A/c (With Revalued amount) XXX

(viii) Revaluation Reserve is not a free reserve & cannot be used for distribution of dividend.

(ix) **Treatment of Depreciation in case PPE is being Revalued:** Depreciation will be calculated on revalued amount and charged into P&L A/c.

(x) **Further treatment/Utilisation of Revaluation Reserve:** There are two alternatives:
Alternative 1: The amount of the surplus transferred into retained earnings that 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.)

Alternative 2: No changes in the balance of revaluation Reserve till the date of derecognition of PPE

* Whatever alternative is being followed by the entity shall be shown as its accounting policy.

(xi) Revaluation surplus shall be recorded on the basis of net of Tax (to be discussed in IND AS 12)

8. **Depreciation:** is a systematic allocation/amortization of depreciable amount (*1) of PPE over the useful life (*2) of the PPE.

*1 **Depreciable amount** is the cost of an asset, or other amount substituted for cost, less its residual value.

*2 **Useful life** is:

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

Relevant points for depreciation:

(i) **Purposes of providing depreciation:** It is an example of the accruals assumption. The accounts of a business try to recognise that the cost of a PPE is gradually consumed as the asset wears out. This is done by gradually writing off the asset's cost to profit or loss over several accounting periods.

(ii) **Depreciating shall be charged on the basis of component of assets.** From the point of view in calculation of depreciation on component basis following points are relevant:

- (a) Cost of each component shall be calculated in the ratio of fair value of each component.
- (b) For each component expected life and expected scrap value shall be indentify separately.
- (c) Suppose, X Ltd purchased machinery which has 3 major components in such a case remainder part of the machinery shall be considered as another separate component.
- (d) A significant part of an item of PPE may have a useful life and a depreciation method that are the same as the useful life and the depreciation method of another significant part of that same item. Such parts may be grouped in determining the depreciation charge.

(iii) **Methods of charging depreciation:** The depreciation method used reflects the pattern in which entity derive expected benefit from the asset. There is no specific method given by Ind As 16, that simply specify it should be on the basis of systematic allocation of depreciable amount. **Generally there are 3 methods used:**

- (1) Production unit method (more appropriate method) – Usage Basis
- (2) WDV Method – Time Basis
- (3) SLM Method. – Time Basis

- (iv) In case there is any change in the method of depreciation then such change shall be taken on prospective basis and it is considered as changes in accounting estimate as per Ind AS 8.
- (v) At each reporting date entity shall reassessed its depreciable amount, estimated scrap value and useful life of asset. In case there is any change then such change shall be considered as change in accounting estimate and its impact shall be taken on prospective basis.
- (vi) Whether depreciation shall be charged in that case company follow revaluation model: Depreciation shall be charged irrespective of company follow either cost model or revaluation model.
- (vii) When depreciation shall be charged: Depreciation shall be charged from the date when asset is ready to use/ available for use irrespective of it has been actually used or not, because depreciation shall be charged due to usage, wear and tear and passage of time etc.
- (viii) Can a company charge depreciation by using different method on same kind of asset or on different assets or assets located in different geographical areas: Method of depreciation shall depend on the basis of nature of asset and its use.

Sr. No.	Case	Can be different method
1	Different kind of asset and same use	Yes
2	Same kind of asset and different use	Yes
3	Different kind of asset & different use	Yes
4	Same kind of asset and same use	No
5	same kind of asset and same use but located in different geographies area	Yes /no - depends on the location/life of asset.

- (ix) When depreciation cease to be charged?
- (i) the date that the asset is classified as held for sale in accordance with Ind AS 105; or
- (ii) If estimated scrap value \geq the carrying amount of asset.
- * The above case shall be reviewed at the end of each year and if it is held that any of the above condition does not exist on reporting date then depreciation shall be charged again.
- Note: Therefore, depreciation does not cease when the asset becomes idle or is retired from active use unless the asset is fully depreciated. However, under usage methods of depreciation the depreciation charge can be zero while there is no production.
- (x) In case land and building are purchased together then for the purpose of charging of depreciation segregate total amount among land and building.
- (xi) Will depreciation be charged on land? Generally, depreciation will not be charged on land because it has infinite life. However, 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.
- (xii) The depreciation charge for each period should be recognised in profit or loss unless it is included in the carrying amount of another asset.

9. **Retired Asset:** Assets are not in active use. Such asset shall be shown at lower of:

- (a) Carrying Amount; or
- (b) Estimated net selling Price.

If $NSP < \text{Carrying Amount} = \text{Difference}$ shall be charged into SPL

10. **Replacement of any asset/component:** In this case

- (a) New PPE shall be capitalized; and
- (b) Old PPE shall be de-capitalized.

What happens if the cost of the previous part/inspection was/was not identified in the transaction in which the item was acquired or constructed? Or it is not practicable for an enterprise to determine the carrying amount of the replaced part /inspection?

Answer:- De-recognition of the carrying amount occurs regardless of whether the cost of the previous Part/ inspection was identified in the transaction in which was acquired or constructed.

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.

11. **Subsequent costs**

(i) **Repair & maintenance:** day-to-day servicing cost is recognised in SPL as incurred.

(ii) **Replacement parts:** Under the recognition principle, an entity recognises in the carrying amount of an item of PPE the cost of replacing part of such an item when that cost is incurred if the recognition criteria are met. The carrying amount of those parts that are replaced is derecognized in accordance with the derecognition provisions of this Standard.

(iii) **Major inspections or overhauls:** Where an asset requires regular overhauls or major inspection in order to continue to operate, the cost of the overhaul is treated as an additional component and depreciated over the period to the next overhaul.

Any remaining carrying amount of the cost of the previous inspection is derecognized in accordance with the derecognition provisions of this Standard.

12. **Disposal/Derecognition/Sale of asset:** The carrying amount of an item of property, plant and equipment should be derecognised:

(a) on disposal; or

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

Any difference between sale value and book value shall be transferred into P&L A/c except in a case where PPE is sold and lease back under Ind AS 116. In case any profit on sale of PPE it shall not be considered as revenue from operation.

13. **Change in expected amount of provision for DROL:** Any change in expected amount of provision for DROL once shall be credited/debited into provision for DROL A/c and other impact shall be given as follows:

Case-1 If asset is maintained at historical cost/using cost model:

- Adjusted with the book value of PPE

Case-2 If PPE is maintained by using revaluation model:

- If balance of revaluation reserve is available then adjust with amount of revaluation reserve
- In case balance of revaluation reserve is not available then another impact shall be given into P&L A/c

14. **Compensation from third parties for items of PPE that were impaired, lost or given up:** Sometime assets is damaged or loss but compensated by 3rd Party e.g. Insurance Claim.

Accounting Treatment:

- Impairments of items of PPE are recognized is - as per Ind AS 36;
- Derecognition of items of PPE retired or disposed is - as per Ind AS 16;
- 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 -as per IND AS 16.

15. **Spare parts, stand-by equipment and servicing equipment:** Items such as spare parts, stand-by equipment and servicing equipment are recognised in accordance with Ind AS 16 when they meet the definition of property, plant & equipment. Otherwise, such items are classified as inventory as per IND AS 2.

16. **Disclosure**

- (i) The financial statements should disclose, for each class of PPE the **measurement bases** used for determining the gross carrying amount; the depreciation methods used; the useful lives or the depreciation rates used; and **the accounting policy to recognized PPE.**
- (ii) Entity is also required to provide **a reconciliation of the carrying amount at the beginning and end of the period showing:**
Additions; assets classified as held for sale acquisitions through business combinations; revaluations, impairment losses recognised or reversed, depreciation; the net exchange differences & other changes.
- (iii) **Items stated at revalued amounts:** If items of property, plant and equipment are stated at revalued amounts, the following should be disclose:
 - (a) the effective date of the revaluation;
 - (b) whether an independent valuer was involved;
 - (c) for each revalued class of PPE, the carrying amount that would have been recognised had the assets been carried under the cost model; and
 - (d) the revaluation surplus, indicating the change for the period and any restrictions on the distribution of the balance to shareholders.

17. **Non-Applicability:**

- (a) PPE classified as held for sale (Ind AS 105)
- (b) **Biological assets** related to agricultural activity **other than bearer plants*** (Ind AS 41)
- (c) Recognition and measurement of exploration and evaluation assets (Ind AS 106)
- (d) Mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources

However, this Standard applies to PPE used to develop or maintain the assets described in (b)–(d).

*A bearer plant is a living plant that:

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

As per IND AS 41 the following are not bearer plants:

- (a) plants cultivated to be harvested as agricultural produce (e.g. trees grown for use as lumber);
- (b) plants cultivated to produce agricultural produce when there is more than a remote likelihood that the entity will also harvest and sell the plant as agricultural produce,

other than as incidental scrap sales (for example, trees that are cultivated both for their fruit and their lumber); and

(c) annual crops (for example, maize and wheat).

18. Some relevant issues/points under Ind AS 16

(i) Paragraph 18 of Ind AS 16 states that an entity applies Ind AS 2 to the costs of obligations for dismantling, removing and restoring the site on which an item is located that are incurred during a particular period as a consequence of having used the item to produce inventories during that period.

(ii) Are any criteria in Ind AS 16 to identify Unit? Ind AS 16 does not prescribe the unit of measure for recognition, i.e., what constitutes an item of property, plant and equipment. Thus, judgement is required in applying the recognition criteria to an entity's specific circumstances.

(iii) What will be material amount to be written-off PPE @ 100%? Ind AS 16 as well as schedule II is silent on material amount. However, entity can identify material amount for the purpose of charging depreciation @ 100% & disclose it as its accounting policy.

(iv) To record PPE whether ownership is required or not?

This issue is explained through this example:

X Ltd set up a factory in Uk and incurred cost of Rs. 10crores to build a road for the convenient of its transport. It is used by the company as well as by the general public. The estimated useful life of such factory is 15 years. Shall such road cost is to be capitalized by X Ltd? (Here issue is whether ownership is required or not)

Answer. The recognition criteria of PPE under Ind As16, spiffy that PPE shall be recognized if following two conditions are fulfilled

(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.

On the basis of above 2 conditions road cost shall be capitalized by entity.

Further Ind As16 does not explain the criteria of unit or component so it is a subjective matter. Further in each Ind AS substance over form works. It means legal ownership is not required if asset is substantially used by the entity.

Conclusion: In the given case it is advisable to capitalize road expenditure as a separate PPE and amortize over the period of 15 years

(v) Subsequent measurement of investment in property under Ind As 40 & ROU Assets under Ind As 116 shall be dealt by Ind As 16.

(vi) PPE shall be capitalized irrespective of production is of desired quality or not.

(vii) What will be cut off date for capitalization? The date when asset is ready to use.

(viii) X Ltd purchased a land and building for Rs. 10cr. Cost of land is Rs. 8crores and cost of building is Rs. 2 crore Building is useless for X Ltd but it purchased building only for the purpose of acquisition of land because X Ltd want to setup a factory on this Land. Calculate capitalization amount of land and building.

Ans. Land is recorded at Rs. 10 crores. Concept will be discussed in details in class.

(ix) Impact of COVID-19: If the items of PPE remain idle during lockdown due to COVID-19, then it should continue to be depreciated where the method of depreciation is other than "number of units of production method."