IAS 16 – Property, Plant & Equipment - Revaluations

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Definition

Property, plant and equipment (PPE) are tangible items that are held by an entity 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.

Recognition

Property, plant and equipment are recognised when the Framework recognition criteria are met: It is probable that future economic benefits that are attributable to the asset will flow to the entity; and the cost of the asset can be reliably measured.

Measurement at recognition

All items of property, plant and equipment are recognised at cost.

Cost includes:

- Purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.
- Directly attributable costs of bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management (*i.e., everything up to the point that it can operate*), for example;

a) Employee wages, pensions, PRSI etc;
b) Cost of site preparation;
c) Initial delivery and handling costs;
d) Installation and assembly costs;
e) Costs of testing the asset to confirm that it can operate; and
f) Professional fees.

- Estimated cost of dismantling and removing the item and restoring the site on which it is located due to an obligation (IAS 37) incurred when the item is acquired or through use (other than to produce inventories) *i.e., if the council, as part of granting planning permission, said that wind turbines were to be allowed for 20 years and then had to be dismantled, the company receiving the planning has an obligation to dismantle the wind turbines and therefore, this provision can be capitalised. The future provision has to be discounted to present value*

- Finance costs
  The capitalisation of finance costs is required for 'qualifying assets', i.e., those which necessarily take a substantial period of time to be ready for their intended use or sale under IAS 23 Borrowing Costs.

Subsequent costs

Subsequent costs on property, plant and equipment are capitalised when the cost of replacement is incurred providing the recognition criteria are met.

Example 1:

Calculate the amount that should be capitalised as Property Plant and Equipment (PPE) based on the following information:

	€
Purchase cost of plant (inclusive of Vat of €63,000)	300,000
Import duties	10,000
Trade discount	20,000
Freight	8,000
Testing of plant	22,000
Professional fees	12,000
Staff training on new plant	5,000
Wages of own staff re installation of plant	7,000

The vat on purchases is recoverable.

Solution:

Amount of PPE to be capitalised:

	€
Purchase Price	300,000
Less Vat	-63,000
Import Duties	10,000
Trade Discount	-20,000
Freight	8,000
Testing of Plant	22,000
Professional Fees	12,000
Wages of Staff re Installation	7,000
Amount to be capitalised	**276,000**

Measurement after recognition

There are two models that can be used re measurement after recognition.

1. Cost Model: PPE is carried at cost less accumulated depreciation and impairment losses

2. Revaluation Model: PPE is carried at revalued amount

Revalued amount = fair value at date of revaluation less subsequent accumulated depreciation and impairment losses.

Fair Value

Fair value of land and buildings is usually determined from market-based evidence by appraisal by professionally qualified valuers.

Fair value of plant and equipment is usually their market value determined by appraisal.

Scope

Where an item of property, plant and equipment is revalued, all other assets in the same class must also be revalued.

Frequency

Revaluations must 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. If property, plant and equipment experiences significant and volatile changes in its fair value, it may be necessary to revalue on an annual basis. Otherwise, every three to five years may be an acceptable time period between revaluations. For example, if we take the property market in Ireland over the last five years, prices are in general increasing due to reduced supply. As a result, if a company is using the revaluation method in relation to buildings, there may have been a necessity to revalue the buildings annually, using an auctioneer, to ensure that the company complied with IAS 16.

Revaluation Gains/Losses

Revaluation gains are reported in other comprehensive income

Dr. PPE – Non-Current Assets - SOFP

Cr. Revaluation Gain – Other Comprehensive Income – SOPL&OCI and taken from there to Revaluation Surplus in Equity section of SOFP

Revaluation losses are charged first against any revaluation surplus (and reported in other comprehensive income) relating to the asset and then to profit or loss.

Dr. Revaluation Surplus – OCI – SOPL&OCI up to the amount of the previous revaluation surplus and any excess loss is debited to expenses i.e.

Dr. Revaluation Loss – Expenses – SOPL&OCI

Cr. PPE – Non-Current Assets - SOFP

Example 2:

On 31.12.20X1 an asset is revalued from €30,000 to €40,000.
On 31.12.20X2 an asset is revalued from €40,000 to €32,000.
On 31.12.20X3 an asset is revalued from €32,000 to €25,000.

Show the journal entries for each of the 3 years

Year Ended 31.12.20X1			
Dr.	PPE	€10,000	
Cr.	Revaluation surplus OCI – SOPL&OCI		€10,000
Year Ended 31.12.20X2			
Dr.	Revaluation loss OCI – SOPL&OCI	€8,000	
Cr.	PPE		€8,000
Year Ended 31.12.20X2			
Dr.	Revaluation loss OCI – SOPL&OCI	€2,000	
Dr.	Revaluation loss – expenses – SOPL&OCI	€5,000	
Cr.	PPE		€7,000

The revaluation surplus may be transferred directly to retained earnings when the asset is derecognised. This may be when the asset is retired or disposed of. However, some of the surplus may be transferred as the asset is used, calculated as the difference between depreciation based on the revalued amount and depreciation based on original cost and so a reserve transfer may be made for this amount over the asset's useful life. Transfers from revaluation surplus to retained earnings are not made through profit or loss but instead through the statement of changes in equity.

Example 3:

If an asset is revalued from €60,000 to €90,000 and has a remaining useful life of 30 years at that date, a revaluation surplus of €30,000 is recognised.

The following entry can be made annually over the remaining life of the asset:

DR	Revaluation surplus (€30,000/30 years)	€1,000	
CR	Retained earnings		€1,000

If this entry is not made the full €30,000 is transferred to retained earnings when the asset is disposed/retired.

Depreciation
The depreciable amount of an asset (cost/revalued amount less residual value) is allocated on a systematic basis over its useful life.

The useful life, residual value and depreciation method must be revised at least at each financial year end and adjusted where necessary.

Example 4:

An asset was purchased for €200,000 on 1 January 20X5 and straight-line depreciation of €40,000 per annum is being charged (5 year life with no residual value). The annual review of asset lives is undertaken and for this particular asset, the remaining useful life as at 1 January 20X7 is ten years.

Required: ***Calculate the depreciation charge for the year ended 31 December 20X7.***

Solution:

Carrying amount as at 31.12.X6	€120,000
€200,000 – (2 years x €40,000 annual depreciation)	
Remaining useful life	10 yearscorm
Annual depreciation charge (€120,000 / 10 years)	€12,000

Disposal of revalued non-current assets
The profit or loss on disposal of a revalued non-current asset should be calculated as the difference between the net-sale proceeds and the carrying amount.
There are 2 steps to disposing of a revalued asset:

a) It should be accounted for in the statement of profit or loss of the period in which the disposal occurs.
b) The remainder of the revaluation surplus relating to this asset should now be transferred to retained earnings.

Note: This does not affect other comprehensive income which is only altered when the asset is actually revalued upwards or downwards.

Example 5:

A Limited purchased a property costing €375,000 on 1.1.20X4 with a useful economic life of 10 years. It has no residual value. At 31.12.20X4, the property was valued at €405,000 resulting in a revaluation gain of €67,500. There was no change to its useful life. On 31.12.20X6, the property was sold for €430,000.

Required: ***How should the disposal on the previous revalued asset be treated in the financial statements for the year ended 31 December 20X6?***

Solution:

	€
Carrying value at 31.12.20X4	405,000
Depreciation for the years 20X5 + 20X6 i.e., €405,000 / 9 years x 2	90,000
Carrying value at 31.12.20X6	315,000
Disposed at 31.12.20X6	430,000
Profit on disposal (taken as a gain to P/L of SOPL&OCI)	115,000

Previous revaluation gain of €67,500 taken to Retained Earnings i.e.

Dr.	Revaluation surplus – Equity – SOFP	€67,500	
Cr.	Retained earnings – Equity – SOFP		€67,500

Disclosure Note:

The following are disclosures necessary under IAS 16 Property, Plant & Equipment:

Property, plant and equipment

	Land and Buildings	Machinery	Office equipment	Total
Carrying value at 1 January				
Additions				
Revaluation surplus/(losses)				
Impairment losses				
Depreciation charge				
Disposals				
Carrying value at 31 December				
At 31 December (end of year)				
Cost or valuation				
Accumulated depreciation/impairment losses				
Carrying Value				
At 31 December (end of previous year)				
Cost or valuation				
Accumulated depreciation/impairment losses				
Carrying Value				