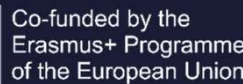




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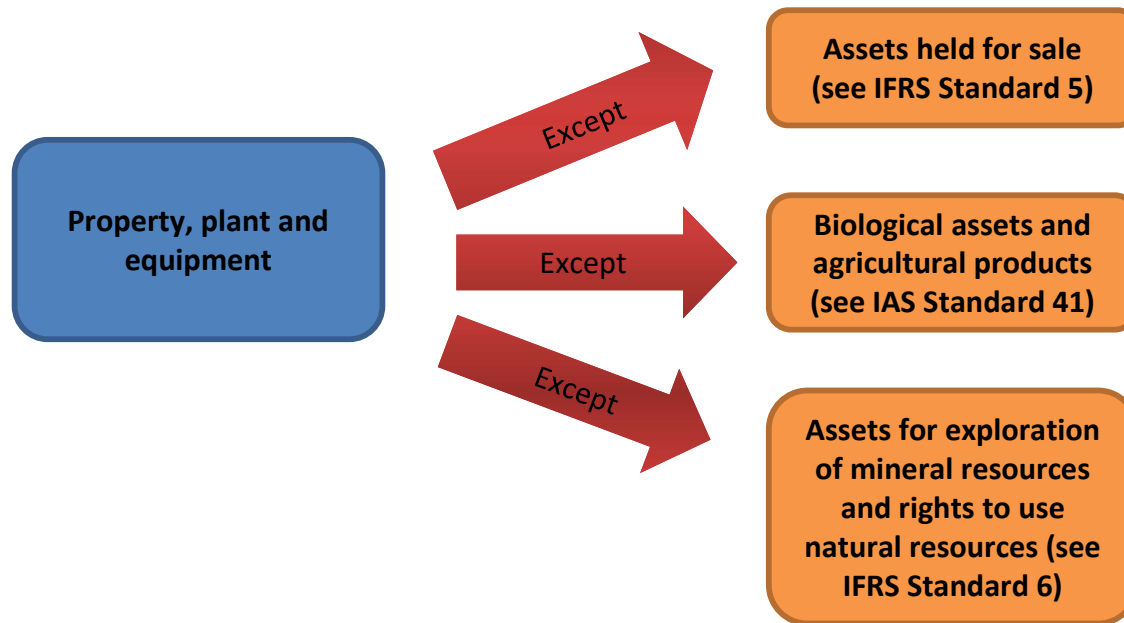
A Digital Learning Platform for Generation Z:
Passport to IFRS®

IAS® Standard 16 Property, Plant and Equipment



Co-funded by the
Erasmus+ Programme
of the European Union

OBJECTIVE AND SCOPE



DEFINITIONS

Property, plant and equipment

the assets that the entity expects to use for more than one reporting period for the purpose of: production or delivery of goods and services; rental, etc.;

Cost

the amount of cash paid or the fair value of the other consideration given to acquire the asset

Fair value

the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date

Carrying amount

the amount of the asset in the statement of financial position, less accumulated depreciation and impairment losses

DEFINITIONS

Depreciation

the allocation of the depreciable amount of an asset over its useful life

Depreciable amount

the value of the asset in the financial statements less its residual value

Residual value

the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life

DEFINITIONS

Impairment loss

the excess of the carrying amount of the asset over its recoverable amount

The useful life of an asset

determined by: the period over which the asset will be used or the amount of output that will be produced with that

Recoverable amount

the higher of an asset's fair value less costs of disposal and its value in use

RECOGNITION

Conditions for recognition

expect to receive economic benefits
from that asset

the price of that asset can be reliably
determined

and

SPECIFIC CASE ABOUT RECOGNITION:

**PURCHASE OF SEVERAL ASSETS AT A TOTAL
PRICE**

EXAMPLE:

PURCHASE OF SEVERAL ASSETS

Case: Purchased garages, land and trucks for a total of CU300,000.

Asset market price:

√ garages: CU140,000

√ land: CU110,000

√ trucks: CU100,000

Question: At what value are property, plant and equipment initially recognised?

Solution:

$$1. \text{Relative share} = \frac{\text{Fair value of the asset}}{\text{Total fair value of all assets}}$$

$$\text{Garages} = \frac{\text{CU}140,000}{\text{CU}350,000} = 0.4$$

$$\text{Land} = \frac{\text{CU}110,000}{\text{CU}350,000} = 0.31$$

$$\text{Trucks} = \frac{\text{CU}100,000}{\text{CU}350,000} = 0.29$$

2. Allocation of the total market price between assets

$$\text{Garages} = \text{CU}300,000 \times 0.4 = \text{CU}120,000$$

$$\text{Land} = \text{CU}300,000 \times 0.31 = \text{CU}93,000$$

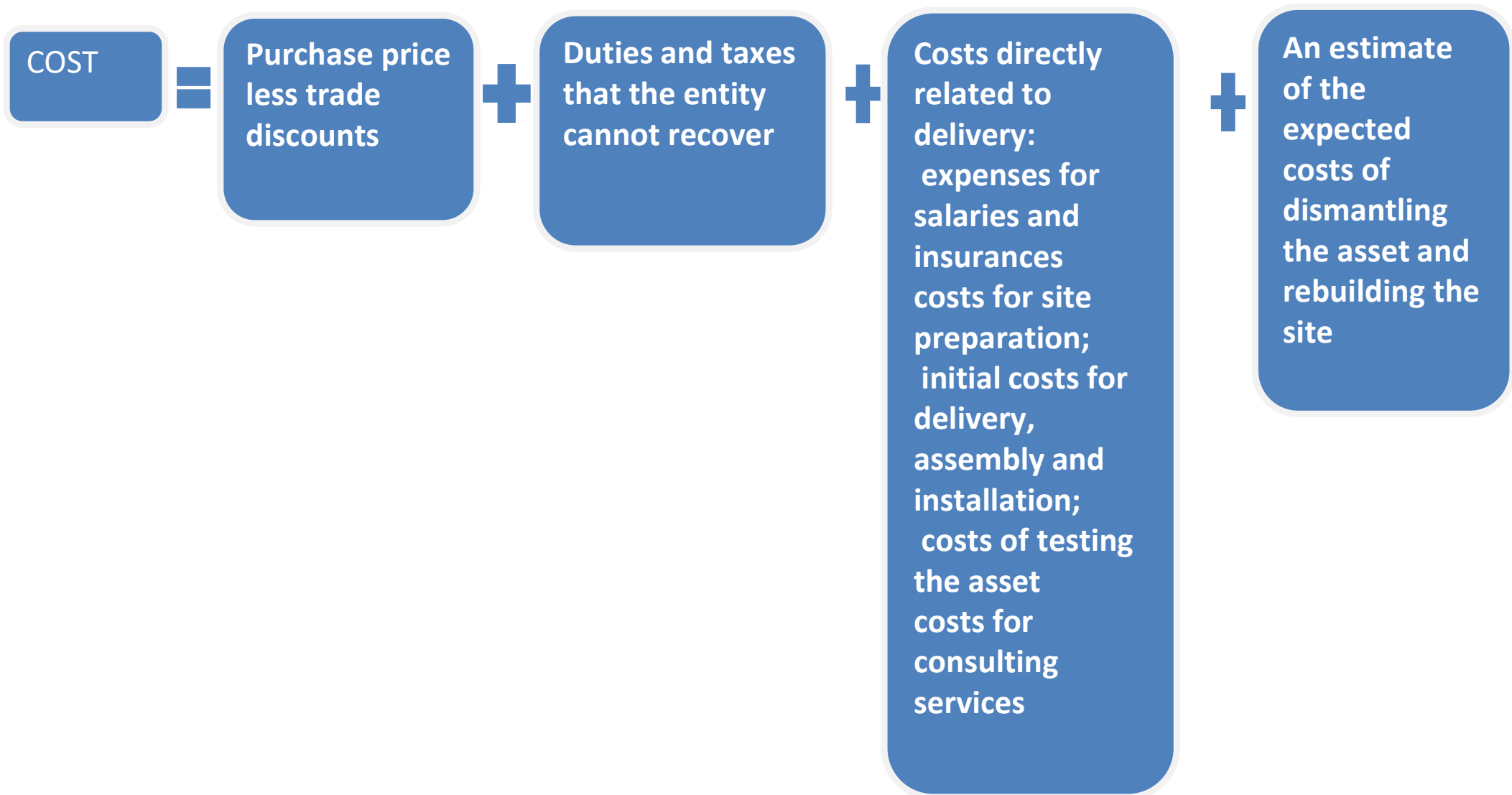
$$\text{Trucks} = \text{CU}300,000 \times 0.29 = \text{CU}87,000$$

MEASUREMENT

Question: At what value are property, plant and equipment initially valued?

Initial measurement at cost

What does the cost include?



EXAMPLE:

Calculation of the cost

Case: Alfa PLC is currently building a new head office.

Purchase of land	CU210,000
Stamp duty	CU8,300
Site clearance	CU14,150
Building materials	CU35,000
Labour:	
- Builders	CU25,800
- Site manager	CU8,300
- Administrative manager	CU5,000
Interest on a loan (taken out on the first day of construction to fund the building)	CU3,300
General overheads	CU7,500

Question: What is the cost of the building?

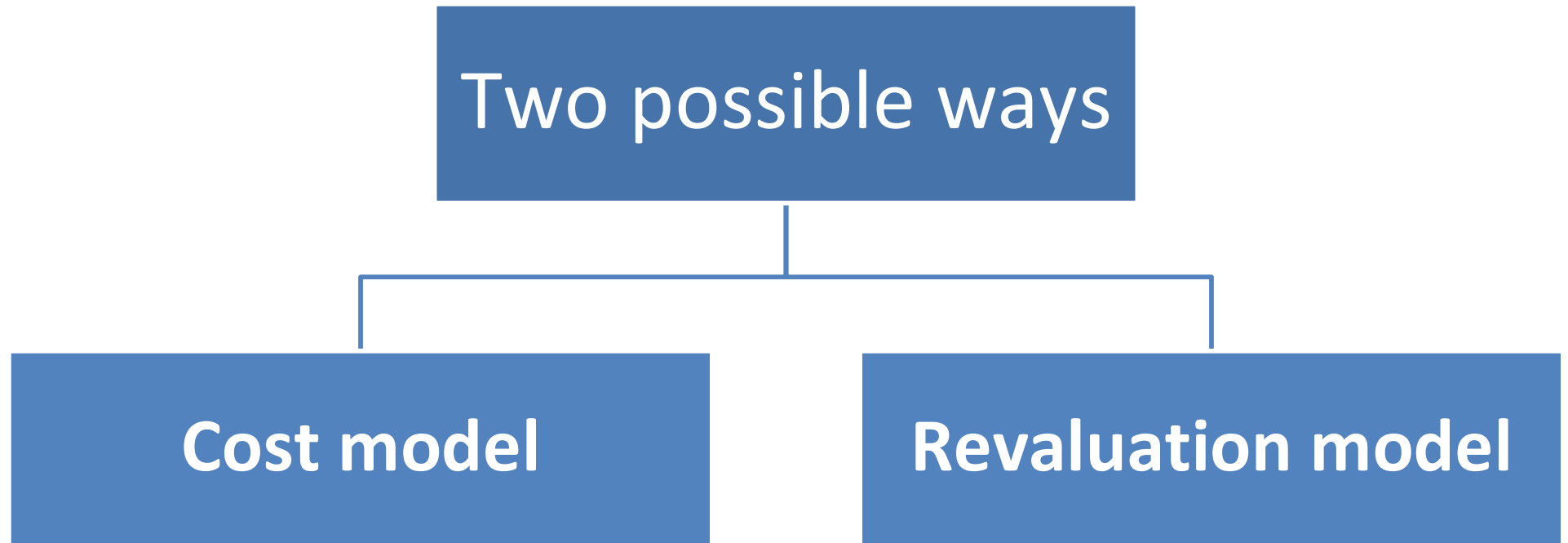
Solution:

Purchase of land	CU210,000	Capitalise
Stamp duty	CU8,300	Capitalise
Site clearance	CU14,150	Capitalise
Building materials	CU35,000	Capitalise
Labour:		
- Builders	CU25,800	Capitalise
- Site manager	CU8,300	Capitalise
- Administrative manager	CU5,000	Expense
Interest on a loan (taken out on the first day of construction to fund the building)	CU3,300	Capitalise *
General overheads	CU7,500	Expense

$$\text{Cost} = \text{CU}210,000 + \text{CU}8,300 + \text{CU}14,150 + \text{CU}35,000 + \text{CU}25,800 + \text{CU}8,300 + \text{CU}3,300 = \text{CU}304,850$$

* See IAS 23 Borrowing costs, because there are qualifying conditions and other considerations that may not allow that amount be capitalised in full.

Measurement after recognition



Determining the value after recognition according to the cost model



Determining the value after recognition according to the revaluation model



Example:

Measurement after recognition using revaluation model

A building, acquired on 1 January 2005:

Cost on 1 January 2005	CU160,000
Useful life	50 years
New fair value on 31 December 2020	CU350,000

Question:

How will the result of the revaluation be accounted for and what will be the effect on Alpha's accounts for the year ended 31 December 2020?

Solution:

The Carrying amount at 31 December 2020 is:

Cost (Gross carrying amount): CU160,000

$$\text{Accumulated depreciation} = \frac{\text{CU } 160,000}{50} = \text{CU } 3,200 \times 16 = \text{CU } 51,200$$

$$\text{Net carrying amount} = \text{CU } 160,000 - \text{CU } 51,200 = \text{CU } 108,800$$

The fair value is CU350,000.

$$\text{Result of the revaluation} = \text{CU } 350,000 - \text{CU } 108,800 = \text{CU } 241,200$$

Dr. Property, plant and equipment	CU190,000
Dr. Accumulated depreciation	CU 51,200
Cr. Revaluation Reserve	CU241,200

STATEMENT OF ACCOUNTS:

Accumulated Depreciation

		Before revaluation	CU51,200	1.
2. Increase in depreciation after revaluation	CU51,200			
		Balance after revaluation: CU 0		

Property, Plant and Equipment

1. Acquisition cost of the machine	CU160,000			
2. Increase in gross carrying amount after revaluation	CU190,000			
Balance after revaluation:		CU350,000		

Revaluation Reserve

		Formation of a revaluation reserve	CU241,200	1.
		Balance after revaluation: CU241,200		

DEPRECIATION

Basic rules

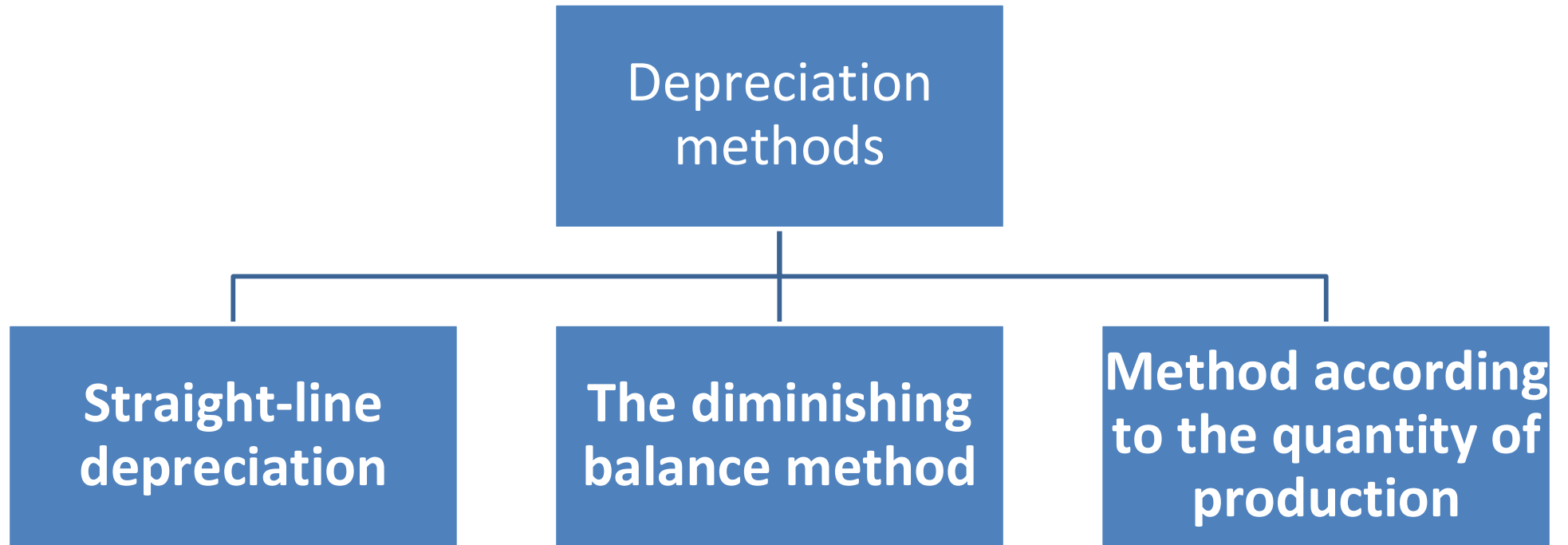
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graph LR; A[Basic rules] --> B[Depreciation of assets begins on the date on which they are available for use]; A --> C[Depreciation to be discontinued on the earlier of the two dates: <br/> ✓ when the entity has determined the relevant asset for sale; <br/> ✓ when the asset is derecognised from the assets of the entity.];
```

Depreciation of assets begins on the date on which they are available for use

Depreciation to be discontinued on the earlier of the two dates:

- ✓ when the entity has determined the relevant asset for sale;
- ✓ when the asset is derecognised from the assets of the entity.

DEPRECIATION METHODS



Example:

Diminishing balance method

Data:

Cost of asset: CU100,000

Useful life: 5 years

Residual value of the asset: CU11,000

Question:

What is the annual depreciation during the useful life of the asset?

Solution:

1. Determination of the depreciable amount of the asset:

$$\text{Depreciation amount} = CU100,000 - CU11,000 = CU89,000$$

2. Determination of the depreciation rate:

$$\text{Depreciation rate} = \frac{100}{\text{Useful life of assets (years)}} = \text{result} \times C \text{ (in percent)}$$

3. Preparation of the depreciation plan:

Year of depreciation	Depreciation rate (%)	Annual depreciation = depreciable amount* depreciation rate	Depreciable amount	Carrying amount
First year	40	$89.000 * 40 = 35,600$	53,400	64,400
Second year	40	$53.400 * 40 = 21,360$	32,040	43,040
Third year	40	$32.040 * 40 = 12,816$	19,224	30,224
Fourth year	50	$19.224 * 50 = 9,612$	19,224	20,612
Fifth year	50	$19.224 * 50 = 9,612$	0	11,000
		89,000		

Accounting for the depreciation of the asset for the first year

Dr. Depreciation expense 35,600

Cr. Accumulated depreciation 35,600

Example:

Depreciation method, according to the quantity of production

Case:

Cost of the equipment: CU40,000

Useful life of the equipment: 80,000 units

Expected volume of output during the useful life of the
asset:

- First year - 35,000 units
 - Second year - 21,000 units
 - Third year - 10,000 units
 - Fourth year - 8,000 units
 - Fifth year - 6,000 units
- Total quality: 80,000 units

Question: What are the depreciation costs in each year of use of the asset

Solution:

1. Determination of the depreciation rate:

$$\text{Depreciation rate} = \frac{\text{depreciation amount}}{\text{volume of production output}} = \frac{\text{CU}40,000}{80,000\text{units}} =$$

CU0,5 per unit

2. Preparation of depreciation plan

Year of depreciation	Manufactured production - units	Depreciation rate (CU per unit)	Depreciation expense (CU)
First year	35,000	0,5	35,000x0,5 =17,500
Second year	21,000	0,5	21,000x0,5 =10,500
Third year	10,000	0,5	10,000x0,5 =5,000
Fourth year	8,000	0,5	8,000x0,5 =4,000
Fifth year	6,000	0,5	6,000x0,5 =3,000
TOTAL	80,000		40,000

DERECOGNITION

When assets are derecognised?

Upon sale, etc.

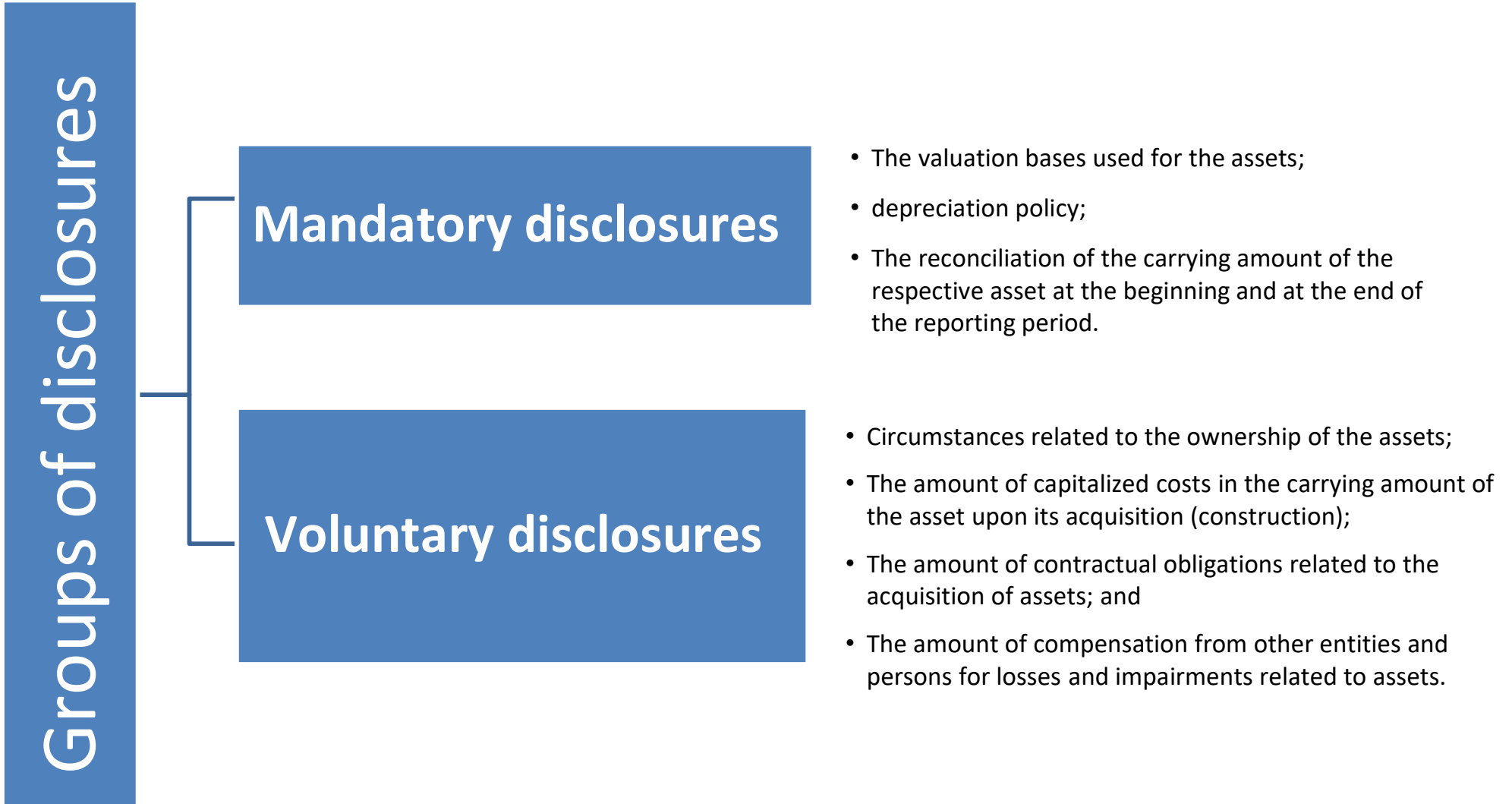
OR

where the entity does not expect and can not receive any benefits from it.

Accounting for the asset derecognition process:

1. Dr. Accumulated depreciation
Cr. Property, plant and equipment
2. Dr. Revaluation reserve
Cr. Retained earnings
3. Dr. Sales revenue
Cr. Property, plant and equipment

DISCLOSURE





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