IAS-16: Property, plant and equipment

Objective of IAS-16
Objective of IAS-16 is to prescribe the accounting treatment for property plant and equipment in financial statements.

Scope of IAS-16
IAS-16 applies to property plant and equipment except for those areas where any other standard applies.
It excludes

4. Non-current assets held for sale (IFRS-5)
5. Exploration and evaluation assets (IFRS-6)
6. Biological assets (IAS-41)
7. Mineral rights and mineral reserves such as oil, natural gas and similar non-regenerative resources.

Recognition criteria
PPE should be recognized in SFP if it meets following criteria

3. Cost can be measured reliably and
4. Future economic benefits are probable from use or sale of the asset

Measurement
Initial measurement (at the time of first time recognition)
At the time of initial recognition property plant and equipment is measured at historical cost.

Subsequent measurement (at reporting date)
At each reporting date property plant and equipment can be measured using cost model or revaluation model.

Cost model:

	$
Cost	x
Accumulated depreciation	(x)
NBV	**X**

Revaluation model:

	$
Revalued amount	x
Subsequent acc depreciation	(x)
NBV	**X**

Let explain with example:

Year -1 NBV = $10,000
FV = $12,000

Increase in revaluation of $2,000 will be recorded as

Dr	PPE	2,000
Cr	Revaluation reserves	2,000

Year - 2 NBV = $11,000
FV = $8,000

This will be recorded as

Dr	Revaluation reserves	2,000 (reverse previous increase)
Dr	SPL	1,000 (recognize additional decrease)
Cr	PPE	3,000 (recognize reduction in value of asset)

Let see another example

Year – 1 NBV = $10,000
FV = $8,000

Decrease in revaluation of $2,000 will be recorded as

Dr	SPL	2,000
Cr	PPE	2,000

Year – 2
NBV = $7,000
FV = $8,500

T his will be recorded as

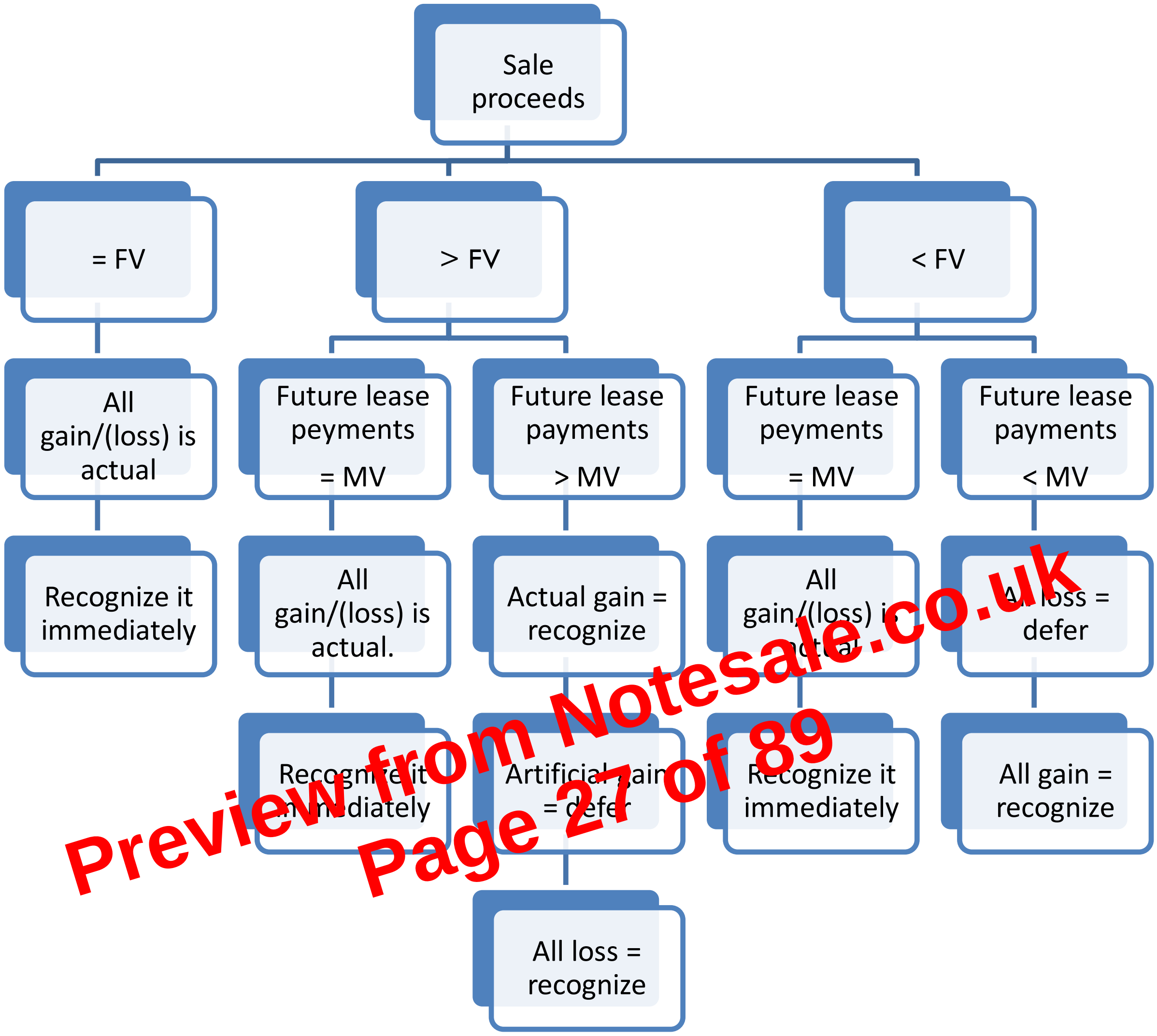
Dr	PPE	1,500
Cr	SPL	1,500 (reverse previous effect of revaluation decrease)

Year – 3
NBV = $6,000
FV = $7,500

This will be recorded as

Dr	PPE	1,500
Cr	SPL	500 (reverse previous effect of revaluation decrease)
Cr	Revaluation reserves	1,000 (recognize additional increase)

Guidelines for recognizing gain or loss on disposal



Actual gain	= FV – NBV
Artificial gain	= SP – FV
	= It is the gain which can be avoided by selling asset at FV.
Defer	= Any deferred gain/(loss) is amortized over lease term
Artificial loss	= It is the loss which can be avoided by selling asset at FV.

Actual gain/(loss) is recognized in SPL in the year of disposal and artificial gain/(loss) is deferred in SFP and amortized over the lease term.
Deferred loss is treated as an asset and deferred gain is treated as a liability in SFP.

Defined benefit pension plan

In this plan, employee's benefit is defined but contribution to be made is not defined. This pension scheme is also called final salary scheme because benefit payable to employee depends upon the final year salary. Employer needs to make sufficient contributions each year to provide defined amount of pension at the end of employment. Contributions to be paid in this scheme will depend upon

- Life expectancy
- Investment returns
- Wage inflation

Accounting treatment of defined benefit pension plans

Accounting treatment of this type of pension scheme is complicated. It needs various assumptions and calculations to determine the amount of expense to be recognized each year in SPL.

How it works? (This is called **project unit credit method**)

For example an employee who had started working with the employer 5 years ago, will retire after 15 years (total 20 years of service) and will be paid a pension of 20% (defined pension: final year salary*20%*20). Current year (year 6 of his employment) salary is $12,500 and wage inflation is expected to be 8% over remaining years of employment. Cost of capital is 10%.

Total amount required today to pay this pension in future is calculated as

Current year (Y-6) salary	=	$12,500		
Final year (Y-20) salary	=	$12,500*$1.08^{14}$	=	$36,715
Amount needed today	=	$36,715*$1.1^{-14}$	=	$9,668

$9,668 is the pension liability (present value of future obligation). Assume that current liability is $9,500 in books. Employer needs to contribute $168 (9,668-9,500) so that he has sufficient funds in plan to pay required amount of pension after 14 years when employee will retire.

- At any time there will be plan assets (measured at FV) and plan liabilities (measured at PV of future obligation).
- Interest will apply on both plans assets and obligations (opening balances). Interest receivable on plan assets will be treated as an income and interest payable on plan obligations will be treated as an expense.
- Employer will make cash contributions each year which will be added in plan assets.
- Employer will pay some benefits each year which will be deducted from plan assets and also from plan liabilities (because it will reduce both pension assets and liabilities).
- There will be service cost (note 3, 4 &5 below) element which will be added in plan obligations.

IAS-20: Government grants

Government grant
Transfer of financial resources from government to an entity against some conditions.
Government grant is recognized in financial statements.

Government assistance
An indirect financial support (non involving direct transfer of economic resources) from government to an entity
Government assistance is only disclosed in notes to accounts.

Recognition of government
It is recognized in financial statements when it becomes receivable.

Classification of government grant
1. Asset related government grant (provided to acquire or develop a qualifying asset)
2. Income related government grant (other than asset related grant)

<u>Asset related government grant</u>

Grant received is treated as deferred income and is amortized over the period of useful life of the asset (depreciating asset) or over the period of conditions to be met (non-depreciating asset) to match with related expense.

Receipt

Dr	cash	x
Cr	deferred income	x (NCL)

Amortization

Dr	deferred income	x
Cr	SPL	x

Repayment

Dr	deferred income	x
Dr	SPL	x
Cr	cash	x

Grant received is deducted from cost of the asset. Then reduced cost of recognized in SFP and depreciated over its useful life.

Receipt

Dr	cash	x
Cr	NCA	x

Repayment

Dr	NCA	x
Dr	depreciation	x
Cr	cash	x

Foreign currency transactions in consolidated financial statements
Foreign subsidiary presents its accounts in its own functional currency which is different from parent's currency. Therefore subsidiary company's accounts are converted or translated into parent company's presentation currency before consolidating it.

Translating subsidiary's financial statements

Statement of financial position
All the assets (including goodwill) and liabilities are translated at closing rate (exchange rate at reporting date).
Note: Goodwill is calculated in functional currency and then translated at closing rate.

Statement of profit or loss
All the incomes and expenses are translated at average rate.

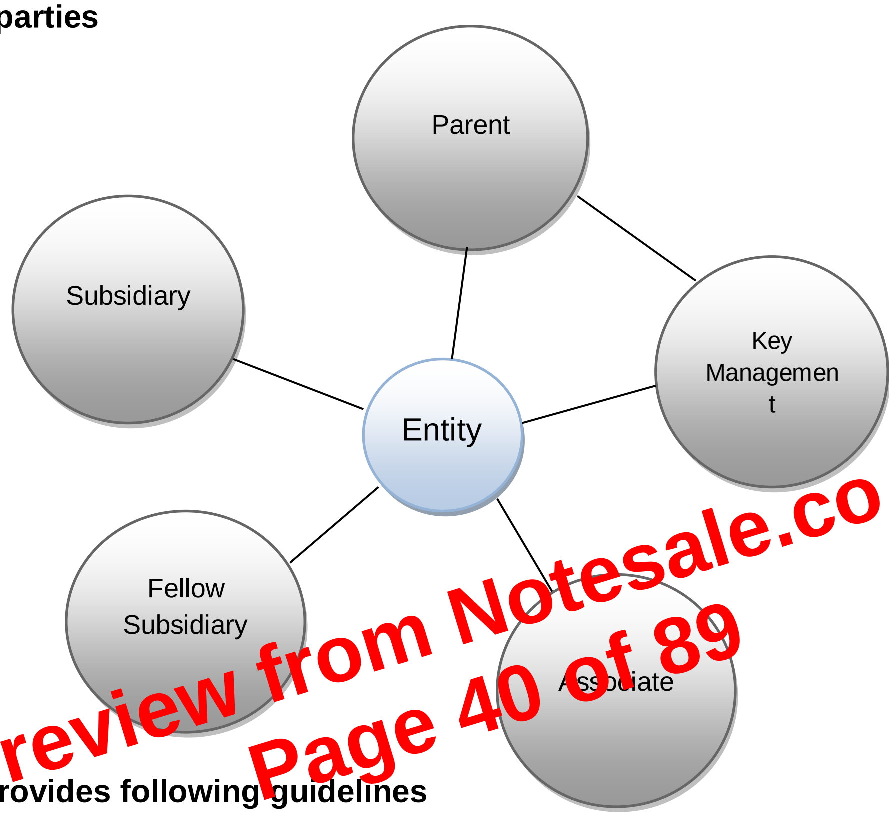
Exchange gain/(loss)
Exchange gain/(loss) is calculates as follows:

	Total	**GI**	**NCI**
Opening net assets			
At closing rate	x		
At opening rate	(x)		
Gain/(loss)	x/(x)	x/(x)	x/(x)
Profit or loss for the year			
At closing rate	x		
At average rate	(x)		
Gain/(loss)	x/(x)	x/(x)	x/(x)
Goodwill			
At closing rate	x		
At opening rate	(x)		
Impairment loss at average rate	(x)		
Gain/(loss)	x/(x)	x/(x)	x/(x)
	↓	↓	↓
	SOCI	**Translation Reserves**	**NCI**

IAS-24: Related party disclosures

All the transactions between related parties are disclosed regardless of whether a price is charged.

Related parties



IAS-24 provides following guidelines

Following are related entities:

a) Close family member of a person who has
   - Control or joint control over the entity
   - Significant over the entity
   - Is a key management personnel of the entity or its parent
b) All entities in the group of reporting entity
c) An associate or joint venture of the entity or any member of its group.
d) An entity and reporting entity both are joint venture of a third party.
e) An entity which runs post employment benefit plan for the benefit of employees of reporting entity or of another entity related to the reporting entity.
f) An entity controlled by or jointly controlled by the person mentioned in (a) above.
g) An entity over which person (a) has significant influence or is a key management personnel.
h) An entity or any member of its group which provide key management personnel services to the reporting entity or its parent.

IAS-38: Intangible non-current assets

Objective of IAS-38

Objective of IAS-38 is to prescribe the accounting treatment for intangible non-current assets in financial statements which are not specifically dealt with in another ISA/IFRS.

Scope of IAS-38

IAS-38 applies to property plant and equipment except for

1. Financial assets (IAS-32)
2. Exploration and evaluation of assets (IFRS-6)
3. Expenditure on development and extraction of minerals, natural gas and similar resources.
4. Intangible assets arising from insurance contracts
5. Intangible assets held for sale (IFRS-5)
6. Defer tax assets (IAS-12)
7. Lease assets (IAS-17)
8. Assets arising from employee benefits (IAS-19)
9. Goodwill (IFRS-3)

Recognition criteria

Intangible non-current asset should be recognized in SFP if it meets following criteria

5. Cost can be measured reliably and
6. Future economic benefits are probable from use or sale of the asset
7. Assets is separately identifiable and in control of the entity (by virtue of legal rights)

Measurement

Initial measurement (at the time of first time recognition)

At the time of initial recognition all intangible non-current assets are measured at historical cost.

Subsequent measurement (at reporting date)

At each reporting date intangible non-current asset can be measured as:

NCA with identifiable useful life	
	$
Cost	x
Accumulated amortization	(x)
NBV	**X**

NCA with un-identifiable useful life	
	$
Cost	x
Impairment loss	(x)
NBV	**X**

De-recognition

Intangible NCA is de-recognized from SFP when it ceases to meet recognition criteria.

De-recognition

Expired

Dr	SPL	x
Cr	NCA	x

Sold

Sold at profit

Dr	Cash/receivables	x
Cr	NCA	x
Cr	SPL	x

Sold at loss

Dr	Cash/receivables	x
Dr	SPL	x
Cr	NCA	x

Grant date
The date on which entity and other party agree to the arrangement OR
The date on which entity offers share options or share appreciation rights to employees.

Vesting date
The date on which the counterparty (employee) becomes entitled to receive cash or equity instruments under the arrangement OR
The date on which share options or share appreciation rights are exercised by employees.

Calculation of equity component and expense resulting from the transaction

- At each reporting date entity will estimate the number of employees who will meet related conditions (employment and performance conditions only, market conditions are ignored).
- At each reporting date calculate amount of expense & equity reserves to be recognized to date on the basis of estimated number of options to be vest and FV of options at **grant date**.
- Total c/d amount is recognized in equity reserve. Increase in equity reserves during the year is recognized as an expense in SPL.

Let explain with an example
An entity has 31 December year end.
On 1 January 2014 it grants 100 share options to each of its 500 employees. Each grant is conditional upon the employee working for the entity till 31 December 2016. At grant date FV of each share option is $15.
Here 1 January 2014 is the grant date. 31 December 2016 is the vesting date. Vesting period is three years from 1 January 2014 to 31 December 2016.
During year ending 31 December 2014, 20 employees left and further 40 employees are expected to leave in future years. FV of option was $18 on 31 December 2014.
During year ending 31 December 2015, further 15 employees left and further 15 are expected to leave in future years. FV of option was $20 on 31 December 2015.
During year ending 31 December 2016, further 10 employees left. FV of option was $22 on 31 December 2016.

Related equity reserves and expense will be recognized as follows:

			Equity reserves	**Expense**
31 December 2014	(500-20-40)*100*15*1/3	=	220,000	220,000
31 December 2015	(500-35-15)*100*15*2/3	=	450,000	230,000
31 December 2016	(500-45)*100*15*3/3	=	682,500	232,500

Accounting treatment after vesting date

Share appreciation rights may be exercised

- At vesting date or
- Over time after vesting date

Exercise at vesting date

Dr	Liability	x
Cr	Cash	x

Exercise over period after vesting date

- Cash amount (intrinsic value) paid to employees who have exercised their rights is treated as an expense.
- Decrease in liability (due to reduced number of employees who will exercise in future) is treated as an income. Liability is measured at FV as during the vesting period.
- At the end of exercise period FV and intrinsic value of SAR will be the same. All the liability will be eliminated as all the employees will have exercised their rights.

Hybrid transactions

If a share based transaction gives the entity choice over its treatment as equity settled or cash settled transaction then

- If entity has an obligation to settle it in cash, it should be treated as cash settled share based transaction and
- If entity has no obligation to settle it in cash, it should be treated as equity settled share based transaction.

Group share based transactions

A subsidiary might receive goods or services from employees for which parent may issue share options or SAR as considerations.

The entity which receives goods or services in a share based arrangement must account for those goods or services irrespective of which entity in the group settles the transaction either in equity or cash.

Classification and measurement of financial liabilities (IFRS-9)

Financial liability can be measured as follows:

Initial measurement	Subsequent measurement
At fair value less transaction cost	At amortized cost
At fair value	At FV through profit or loss (FVTPL)

Financial liabilities measured at amortized cost

Financial liabilities can be (not necessarily) measured at amortized cost if it is not measured at FVTPL. This is default classification for financial liabilities. Amortized cost is calculated in the same manner as for financial assets.

Financial liabilities measured at FVTPL

Financial liabilities held for trading and out of money derivatives are measured at FVTPL.

It is also possible to measure a liability at FVTPL which would otherwise be measured at amortized cost, if it eliminates or reduces the accounting mismatch.

In this case changes in FV are treated as:

FV changes due to own credit risk	Remaining FV changes
Recognized in other comprehensive income	Recognized in profit or loss

Compound financial instruments

A compound financial instrument is that which has features of both financial liability and financial equity. For example convertible bonds are compound financial instruments.

It is measured as:	$
Total instrument value	x
PV of future obligations (liability component)	(x)
Equity instrument	x

- Liability component is measured at amortized cost.
- Equity component is recognized as other components of equity in equity capital.

Consolidated reserves (retained earnings) account

	$	$
Parent reserves (100%)	--	x
Subsidiary post acquisition reserves (CI %age)	--	x
Post acquisition adjustments (CI %age)	x	x
Impairment of GW (CI %age)	x	--
Decrease/increase in investment in A	x	x
Balance c/d	x	--
	---	---
	<u>X</u>	**<u>X</u>**

It contains only post-acquisition elements therefore only post acquisition adjustments (CI %age) are made in this account.

COI (NCI) account

		(NCI %age)
	$	$
FV of NCI	x	
Share capital		x
Share premium		x
Pre acquisition reserves		x
Pre acquisition adjustments	x	x
Goodwill		x (balance)
	--	--
	<u>X</u>	**<u>X</u>**

This is only required if entity uses FV method for goodwill calculation. COI (NCI) account is a sub working. Its balance will be adjusted in other accounts of the working by a double entry.

If it shows positive goodwill

Dr	Goodwill	x
Cr	NCI	x

If it shows negative goodwill

Dr	NCI	x
Cr	Goodwill	x

Disposal of a subsidiary

a) Full disposal (control lost) 80% - 80% = Nil
b) Subsidiary to financial investment (control lost) 80% - 60% = 20%
c) Subsidiary to associate (control lost) 80% - 50% = 30%
d) Subsidiary to subsidiary (control not lost) 80% - 20% = 60%

Gain/(loss) on disposal is only calculated when control is lost. When control is not lost, it is treated as a simple transaction between CI and NCI.

Calculation of gain or loss

In parent individual accounts

	$
Sale proceeds	x
COI sold	(x)
Gain/(loss)	**x/(x)**
Taxation	(x)
Gain after tax	**x**

In consolidated accounts

	$	
Sale proceeds	x	50%
FV of retained interest	x	30%
BV of NCI	x	20%
Total	x	100%
FV of NCA sold	(x)	(x)
Unimpaired GW	(x)	(x)
Gain/(loss)	**x**	**x**

In C above

Transaction between controlling interest and non controlling interest

Acquisition

Dr	NCI	x (reduction in NCI)
Cr	Cash	x (cash paid to acquire further share)
Dr/Cr	other component of equity	x (balancing figure)

Disposal

Dr	Cash	x (cash received from sale of shares)
Cr	NCI	x (increase in NCI)
Dr/Cr	Other component of equity	x (balancing figure)

In this case gain/(loss) is not calculated on disposal as control is not lost.