

- (f) Tax charge for the year: \$427,000. Since retained profit has been credited with group profit before tax in (c), it must now be debited with the group tax charge for the year. The other entry is to credit the tax payable and deferred tax accounts. This is entered in the worksheet as:

Dr Retained profit	427,000	
Cr Tax payable		327,000
Cr Deferred tax		100,000

- (g) Share of tax of associate: \$40,000. Under equity accounting, the investment account balance is increased by the group's share of the associate's after-tax profit. Thus, after the investment account balance is increased by the group's share of associate's profit before tax (see (e)), the investment account should be credited with the group's share of the associate's tax. The debit entry is against the retained profit account. This is because (as mentioned in (c)) retained profit was increased by the profit before tax (which includes the share of the associate's profit before tax). It must now be debited with the group's share of the associate's tax. These are entered in the worksheet as:

Dr Retained profit	40,000	
Cr Investment		40,000

- (h) Non-controlling interest in the current year's profit: \$164,000. This decreases the amount of the group's retained profit and increases non-controlling interest in the subsidiary's net assets. This item is entered in the worksheet as:

Dr Retained profit	164,000	
Cr Non-controlling interest		164,000

- (i) Dividend appropriation: \$100,000. As the result of (c), (f), (g) and (h), the retained profit account has been credited with the group after-tax profit. However, the retained profit account is increased by the group's share of the year's retained profit only. Therefore, dividend appropriation has to be deducted from retained profit. The other entry is to credit to dividend payable account. This item is entered in the worksheet as:

Dr Retained profit	100,000	
Cr Dividend payable		100,000

- (j) Purchase of machinery: \$650,000. This is the balancing figure in the machinery account in the worksheet ($2,265 + 500 - 700 - 445 + X = 2,270$). Since there is no disposal of non-current assets, it can be inferred that the balancing figure is the cost of purchase during the year. This item is entered in the worksheet as:

Dr Machinery	650,000	
Cr Investing activities		650,000

- (k) Dividend received from associated company: \$20,000. This is the balancing figure in the investment in the associated company account in the worksheet ($240 + 100 - 40 - X = 280$). It can be inferred that the balancing figure is the amount of dividend received from the associated company. This is because under

equity accounting, the investment account balance is reduced by the amount of dividends received. This item is entered in the worksheet as:

Dr Investing activities	20,000	
Cr Investment		20,000

- (l) Payment of tax: \$87,000. This is the balancing figure in the tax payable account in the worksheet ($140 + 327 - 20 - X = 360$). It can be inferred that the company has paid tax of \$87,000 during the year. This item is entered in the worksheet as:

Dr Tax payable	87,000	
Cr Operating activities		87,000

- (m) Payment of dividend: \$100,000. This is the balancing figure in the dividend payable account in the worksheet ($100 + 100 - X = 100$). It can be inferred that the company has paid a dividend of \$100,000 during the year. This item is entered in the worksheet as:

Dr Dividend payable	100,000	
Cr Financing activities		100,000

- (n) Payment of dividend to non-controlling interest: \$20,000. This is the balancing figure in the non-controlling interest account in the worksheet ($709 + 100 + 164 - X = 953$). It can be inferred that the subsidiary companies have paid \$20,000 dividends to non-controlling shareholders during the year. This item is entered in the worksheet as:

Dr Non-controlling interest	20,000	
Cr Financing activities		20,000

- (o) Increase in stock: \$600,000. This is the net change in stock balances. The increase in stock means that part of the funds from operation is tied up in stock and consequently cash inflow from operating activities is reduced. It is entered in the worksheet as:

Dr Stock	600,000	
Cr Operating activities		600,000

- (p) Increase in trade debtors: \$150,000. This is the net change in debtors balances. The increase in debtors means that part of the funds from operation is tied up with debtors and consequently cash inflow from operating activities is reduced. It is entered in the worksheet as:

Dr Debtors	150,000	
Cr Operating activities		150,000

- (q) Increase in creditors: \$320,000. This is the net change in creditors balances. The increase in creditors means that part of the purchases for the period has not been paid for and consequently cash outflow from operating activities is reduced. It is entered in the worksheet as:

Dr Operating activities	320,000	
Cr Creditors		320,000

- (r) Increase in cash: \$540,000. This is the net changes in the cash and cash equivalents (C&CE) accounts. This is the final reconciling item and is entered in the worksheet as:

Dr Cash	540,000	
Cr Increase in cash		540,000

Based on the data gathered in the lower portion of the worksheet, the consolidated statement of cash flows for C Ltd group for the year ended 31 December 20x8 (where the cash flows from operating activities are reported using the "indirect method") may be presented as follows:

C Ltd group
Consolidated statement of cash flows
for the year ended 31 December 20x8

	\$'000
Cash flows from operating activities	
Profit before tax	1,182
Add/(less) non-cash items	
Depreciation	445
Share of profit of associate	(100)
Add/(less) changes in working capital	
Stock	(600)
Debtors	(150)
Creditors	320
Payment of tax	(87)
Net cash from operating activities	<u>1,010</u>
Cash flows from investing activities	
Disposal of subsidiary	680
Acquisition of subsidiary	(400)
Purchase of machinery	(650)
Dividends received from associate	20
Net cash used in investing activities	<u>(350)</u>
Cash flows from financing activities	
Payment of dividend	(100)
Payment of dividend to non-controlling interests	(20)
Net cash from financing activities	<u>(120)</u>
Net increase in C&CE	540
C&CE at 1 January 20x8	94
C&CE at 31 December 20x8	<u>634</u>

Notes to the consolidated statement of cash flows

- (1) Cash and cash equivalents
Cash and cash equivalents consist of cash on hand and balances with banks.

- (2) Disposal of subsidiary
During the year, the group disposed of one of its subsidiaries, S Ltd. The effects of the disposal are as follows:

	\$'000
Net assets disposed off	
Fixed assets	700
Long-term loan	(100)
Stock	100
Trade debtors	50
Trade creditors	(50)
Tax payable	(20)
Cash	<u>20</u>
Disposal price	700
Less cash of S Ltd	<u>20</u>
Cash flow on disposal	<u>680</u>

- (3) Acquisition of subsidiary
During the year, the group acquired a subsidiary, T Ltd. The effects of the acquisition are as follows:

	\$'000
Land	500
Minority interest	<u>(100)</u>
Cash flow on acquisition	<u>400</u>

Notes to the solution

- (1) The effect of the disposal of subsidiary is presented in the consolidated statement of cash flows as a single line item as "Disposal of subsidiary \$680,000". The amount of \$680,000 is arrived at after netting off the \$20,000 cash of the subsidiary disposed of with the \$700,000 cash received as disposal price.
- (2) The effect of the acquisition of subsidiary is presented in the consolidated statement of cash flows as a single line item as "Acquisition of subsidiary \$400,000".
- (3) The effect of non-controlling interest on group cash is presented in the consolidated statement of cash flows as "Payment of dividend to non-controlling interest \$20,000".
- (4) The effect of the associate in group cash is presented in the consolidated statement of cash flows as "Dividend from associate: \$20,000". The profit before tax includes the group's share of the associate's profit before tax. Therefore, under the "indirect method", the share of the associate's profit is deducted from the profit before tax.

CHANGES IN ACCOUNTING POLICIES

¶8-300 Changes in accounting policies

A change in accounting policy involves a change from one generally accepted accounting principle (GAAP) to another.

Thus, the following are not to be accounted for as changes in accounting policies:

- a change from a non-GAAP to a GAAP (this is a correction of error)
- the adoption of a new GAAP for a new transaction or event (para 16), and
- a change from one GAAP to another as a result of a change in estimate (this should be treated as a change in estimate).

Also, while changing the measurement basis for fixed assets from cost to revaluation is a change in accounting policy, it should be dealt with in accordance with FRS 16 *Property, Plant and Equipment*. Similarly, changing the measurement basis for intangible assets from cost to revaluation is a change in accounting policy but it is dealt with in accordance with FRS 38 *Intangible Assets*. Therefore, the provisions of FRS 8 are not applicable to these changes in accounting policy (para 17).

Consistency is one of the fundamental accounting assumptions underlying the preparation of financial statements. It is therefore general practice not to change accounting policy.

There may be circumstances, however, that necessitate/warrant a change in accounting policy. FRS 8 provides that a change in accounting policy should be made only if the change (para 14):

- is required by a FRS or an INT FRS, or
- will result in the financial statements providing reliable and more relevant information.

FRS 8 provides that changes in accounting policy should be accounted for as follows:

- For a change in accounting policy necessitated by the initial adoption of a new accounting standard, the change should be accounted in accordance with the specific transitional provisions, if any, of that accounting standard (para 19(a))
- For a change in accounting policy under other circumstances (and for cases where the new accounting standard does not contain transitional provisions), FRS 8 requires that it should be accounted for retrospectively (para 19(b))
- For a change in accounting policy where it is impracticable to determine the cumulative effect, FRS 8 allows the change to be accounted for prospectively (para 25 and 27).

Under FRS 8, it is “impracticable” to determine the cumulative effect if: (i) the effects of the retrospective application are not determinable even after making every reasonable effort to do so, (ii) the retrospective application requires assumptions about management’s intent in that period, or (iii) the retrospective application requires significant estimates of amounts and it is impossible to separate estimate information that existed at point of retrospective application and that would have been available at the point when the financial statements for that prior period were issued (para 5).

FRS 8 requires that when there is a change in accounting policy, the nature, reason and effect of the change be disclosed (para 28 and 29).

Specifically, for a change in accounting policy necessitated by a FRS or INT FRS (and which contains transitional provisions), FRS 8 requires the following to be disclosed, where applicable and to the extent practicable (para 28):

- The title of the FRS or INT FRS
- The fact that the change in accounting policy is made in accordance with its transitional provision
- The nature of the change in accounting policy
- A description of the transitional provision
- The transitional provision that might have an effect on future periods
- The amount of the adjustment for each affected line item in the current year and prior year financial statements
- The amount of adjustment on basic and diluted earnings per share figures of current and prior period presented
- The amount of the adjustment relating to periods before those presented
- If retrospective application is impracticable, the reason why, and a description of how and from when the change in accounting policy has been applied.

For a voluntary change in accounting policy, FRS 8 requires the following to be disclosed, where applicable and to the extent practicable (para 29):

- the nature of the change in accounting policy
- the reason why applying the new accounting policy provides reliable and more relevant information
- the amount of the adjustment for each affected line item in the current year and prior year financial statements
- the amount of adjustment on basic and diluted earnings per share figures of current and prior period presented
- the amount of the adjustment relating to periods before those presented

- if retrospective application is impracticable, the reason why, and a description of how and from when the change in accounting policy has been applied.

Where an entity has not applied a new FRS or INT FRS that has been issued but is not yet operative, FRS 8 requires the entity to disclose the fact and information relevant to assessing the possible impact of the new standard on the entity's financial statements in the period of initial application (para 30).

Specifically, FRS 8 requires the entity to consider disclosing the following (para 31):

- The title of the new standard
- The nature of the impending change in accounting policy
- The official operative date of the new standard
- The date at which the entity plans to apply the new standard, and
- Either a discussion of the impact the initial application of the new standard is expected to have on the entity's financial statements or a statement to the effect that the impact is not known or cannot be reasonably estimated.

¶8-310 Retrospective method

Under the "retrospective" method of accounting for a change in accounting policy, the cumulative effect of the change is computed and reported as an adjustment to the beginning retained earnings in the statement of changes in equity. Also, the comparative information in respect of prior years, which is included in the financial statements, should be amended.

The adjustment to the beginning retained earnings and the amendment to the comparative figures are made on the basis that the new accounting policy is assumed to have been adopted since the first day of the related transaction.

The following example illustrates the application of the retrospective method:

Illustration 2

ABC Ltd (the Company) adopts 31 December accounting year ends. In January 2001, the Company purchased a factory for investment purposes at a cost of \$5 million.

In compliance with FRS 25 *Accounting for Investments* (that has since been superseded), the factory has been accounted for at cost without depreciation.

A new accounting standard, FRS 40 *Investment Property*, has been issued to supersede FRS 25 effective for annual periods beginning on or after 1 January 2007.

Thus, for its annual financial years beginning 1 January 2007, the Company has to apply FRS 40 to account for the factory. The Company decided to adopt the "cost model" under FRS 40. For depreciation of the factory, the Company decided to adopt the straight line method of depreciation, based on an estimated useful life of 50 years with no salvage value. FRS 40 requires the transition to the cost model to be accounted for retrospectively in accordance with the provisions of FRS 8.

The Company has agreed with the Inland Revenue Authority of Singapore (IRAS) that the factory is outside the scope of the *Income Tax Act*. In early March 2008, the assistant accountant of the company, who was not aware of the change in accounting policy, prepared the 2007 financial statements of the company as shown below (with 2006 published data as comparative figures).

	2007	2006
	\$'000	\$'000
Income statements		
Revenue	900	600
Less expenses	500	270
Less finance costs	150	130
Profit before tax	250	200
Less tax	45	30
Profit after tax	205	170
Retained earnings (in statement of changes in equity)		
Balance as at 1 January 2006		400
Profit for the year 2006		170
Balance as at 31 December 2006		570
Profit for the year 2007		205
Balance as at 31 December 2007		775
Balance sheets		
Fixed assets	3,200	2,600
Investment property	5,000	5,000
Other net current asset	800	400
	<u>9,000</u>	<u>8,000</u>
Share capital	6,000	6,000
Retained earnings	775	570
Bank loans	<u>2,225</u>	<u>1,430</u>
	<u>9,000</u>	<u>8,000</u>

The 2007 financial statements of the company were expected to be issued on 30 March 2008.

Solution

Calculate the cumulative effect of the change in accounting policy up to 1 January 2007 (and also that up to 1 January 2006 for the purpose of amending the 2006 financial statements presented as comparative figures in the 2007 annual reports). The cumulative effect is the depreciation charge per year of \$100,000.

Cumulative effect as at 1 January 2006:	\$100,000 × 5
	= \$500,000
Cumulative effect as at 1 January 2007:	\$100,000 × 6
	= \$600,000

The journal entry required in 2007 to record the change in accounting policy is as follows:

Dr Beginning retained earnings	600,000	
Cr Accumulated depreciation		600,000
(to account for the cumulative effect of change in accounting policy up to 1 January 2007)		

The income statement for the year ended 31 December 2007 (with 2006 account as comparatives) will be presented as follows:

	2007	2006
	\$'000	\$'000
Revenue	900	600
Less expenses	600	370
Less finance costs	<u>150</u>	<u>130</u>
Profit before tax	150	100
Less tax	<u>45</u>	<u>30</u>
Profit after tax	<u>105</u>	<u>70</u>

Retained earnings (in statement of changes in equity)

	\$'000
Balance at 1 January 2006	
As previously stated	400
Change in accounting policy	<u>(500)</u>
As restated	(100)
Profit for year 2006 (restated)	<u>70</u>
Balance at 31 December 2006	(30)
Profit for year 2007	<u>105</u>
Balance at 31 December 2007	<u>75</u>

The balance sheet as at 31 December 2007 (with 2006 balance sheet as comparative figures) will be presented as follows:

	2007	2006
	\$'000	\$'000
Fixed assets	3,200	2,600
Investment property	4,300	4,400
Net current asset	<u>800</u>	<u>400</u>
	<u>8,300</u>	<u>7,400</u>
Share capital	6,000	6,000
Retained earnings/losses	75	(30)
Bank loans	<u>2,225</u>	<u>1,430</u>
	<u>8,300</u>	<u>7,400</u>

In the notes to the accounts, the nature, reason and effect of the change in accounting policy may be disclosed as follows:

Note 3. Change in accounting policy

During the year, the investment property has been changed to comply with the cost model under FRS 40. The change has been accounted for retrospectively. The effect of the change in 2007 and 2006 financial statements are as follows:

	2007	2006
	\$'000	\$'000
Increase in depreciation expense	100	100
Decrease in profit after tax	100	100
Decrease in investment property	700	600
Decrease in retained profit	700	600

Notes to the solution

- (1) The cumulative effect of the change is accounted for as an adjustment to the beginning retained earnings.
- (2) The 2006 financial statements that are presented as comparative figures in the 2007 annual reports have been amended as if the new policy had been used then. The 2006 financial statements as presented in the 2006 annual report are not amended, as there is no such statutory requirement in Singapore.
- (3) The net effect of the retrospective application is that the financial statements (of the current year and of all prior years which are presented as comparative figures) will be presented as if the new policy had been in used then. For example, the carrying amounts of the investment property are presented in the 2006 and 2007 balance sheets as if the cost model has been adopted from the date the investment property was acquired in January 2001.

An illustration of the disclosure of a change in accounting policy which has been accounted for using the "retrospective method" is extracted from the notes to accounts in the 2002 Annual Report of Keppel Land Ltd and shown as follows:

Notes to accounts

Change in accounting policy

With effect from 1 January 2002, the Group changed its accounting policy with respect to the treatment of deferred taxation in order to conform with the new requirements of Statement of Accounting Standard (SAS) 12 on income taxes. In the previous year, taxation expense excluded the tax effects of certain timing differences when there was reasonable evidence that these timing differences would not reverse for some considerable period ahead. Under the revised SAS 12, taxation expense had been provided by the Group using the liability method on all temporary differences.

The change in accounting policy resulted in a prior year charge to retained profit (RP) as at 31 December 2001 amounting to \$35,059,000 for the Group and \$9,377,000 for the Company. Taxation expense for 2002 for the Group increased by \$2,509,000 (2001: \$2,751,000), and for the Company increased by \$619,000 (2001: \$321,000).

¶8-320 Prospective method

As provided for in FRS 8, a change in accounting policy is accounted for using the prospective method if it is impracticable to determine the cumulative effect of the change.

Under FRS 8, it is “impracticable” to determine the cumulative effect if the effects of the retrospective application are not determinable even after making every reasonable effort to do so (para 5).

Under the “prospective” method, the effect of the change is accounted for in the current period. No attempt is made to account for the “cumulative effect” of the change on the comparative figures in, the prior period’s financial statements.

The following example illustrates the application of the prospective method:

Illustration 3

XYZ Ltd (with 31 December accounting year ends) purchased a building in early 20x1 at a cost of \$100 million and depreciated the building using the straight line method over 50 years, commencing from 20x1.

In 20x5, XYZ Ltd changed its depreciation policy so as to apply the component approach as required by FRS 16 *Property, Plant and Equipment*.

Under the component approach, XYZ Ltd will have to separately depreciate the building, the escalator and the other fixtures.

An engineering study shows that as at 1 January 20x5, the building, together with its other components, has a market value that is equal to its carrying amount of \$92 million. However, further analysis indicates that the building has a market value of \$69 million and a remaining useful life of 46 years, the escalator has a market value of \$13 million and a remaining useful life of 10 years and the other fixtures have a market value of \$10 million and remaining life of five years.

XYZ Ltd has not kept detailed accounts of its fixed assets and it is impracticable for XYZ Ltd to determine the respective costs and A/D amounts for the building, escalator and other fixtures if the component approach has been adopted since 20x1.

In this case, XYZ Ltd will have to account for the change in accounting policy prospectively.

Under the prospective method, no change is made to the prior years’ figures. The effect of the change in accounting policy will be accounted for only from 20x5 onwards.

Thus, while from 20x1 to 20x4, the annual depreciation charge is \$2 million ($\$100 \text{ million} \div 50 \text{ years}$), the depreciation charge for 20x5 will be \$4.8 million [$(\$69 \text{ million} \div 46 \text{ years}) + (\$13 \text{ million} \div 10) + (\$10 \text{ million} \div 5)$].

The nature, reason and effect of the change in accounting policy may be disclosed as follows:

Note 12 Change in accounting policy

Previously the cost of the whole building has been depreciated as a single item using the straight line method over 50 years. In 20x5, FRS 16 comes into effect and requires the component approach. Accordingly, the depreciation policy for the building

is changed to adopt the component approach. This change in accounting policy is accounted for prospectively, as it is impracticable to determine the cumulative effect of the change. The effects of the change on the 20x5 financial statements are as follows:

	\$'mil
Increase in depreciation charge	2,800,000
Decrease in profit before tax	2,800,000
Decrease in tax expense	560,000
Decrease in profit after tax	2,240,000
Decrease in book value of building	2,800,000
Decrease in retained profit	2,240,000
Decrease in deferred tax liability	560,000

An illustration of the disclosure of a change in accounting policy which has been accounted for using the “prospective method” is extracted from the notes to accounts in the 2002/03 *Annual Report of Singapore Airlines Ltd* and shown as follows (Note: SAS 20 is the predecessor of FRS 21):

Notes to accounts

SAS 20 The effect of changes in foreign exchange rates

The revised SAS 20 came into effect on 1 April 2002. Accordingly, the financial results of foreign subsidiary, associated and joint venture companies are now translated into Singapore dollars at the annual average exchange rates. Previously, such results were translated at exchange rates prevailing at the balance sheet date. The change in accounting policy was applied prospectively because the financial effect of adopting the revised SAS 20 was not significant.

CORRECTION OF ERRORS

¶8-400 Correction of Errors

Errors referred to in FRS 8 are material prior period errors discovered in the current period that are of such significance that the financial statements of one or more prior periods can no longer be considered to have been reliable at the date of their issue. Such errors include the effects of mathematical mistakes, application of the wrong accounting policy, misinterpretation of facts, oversights and fraud (para 5).

FRS 8 provides that the correction of errors should be accounted for retrospectively (para 42). However, for a correction of error where it is impracticable to determine the cumulative effect, FRS 8 allows the correction to be accounted for prospectively (para 44 and 45).

31 December 20x4	
Dr Depreciation expense	9,308
Cr Accumulated depreciation (to record depreciation)	9,308

For initial direct costs incurred, FRS 17 provides that the costs that can be identified as directly attributable to activities performed by the lessee for a finance lease are to be included as part of the amount recognised as an asset under the lease (para 24).

¶17-420 Accounting by lessors

For the lessor, the asset under a finance lease is, in substance, sold to the lessee. Therefore, FRS 17 provides that an asset held under a finance lease should be accounted for in the lessor's books not as a fixed asset but as a receivable (para 36).

FRS 17 further requires the receivable to be presented in the statement of financial position at an amount equal to the "net investment in the lease" (para 36), which is defined in para 4 as "the gross investment in the lease less unearned finance income".

In practice, the lease receivable account is normally recorded at an amount equal to the gross investment in the lease, which is defined in para 4 as "the aggregate of the minimum lease payments (from the lessor's viewpoint) plus any unguaranteed residual value accruing to the lessor". The unearned finance income (which is defined in para 4 as "the difference between the lessor's gross investment in the lease and its present value") is recorded and accounted for separately. At the end of each accounting period, the unearned finance income balance is deducted from the lease receivable balance to arrive at an amount which is the net investment in the lease.

FRS 17 provides that the finance income should be recognised based on a pattern reflecting a constant periodic rate of return on the lessor's net investment outstanding in respect of the finance lease (para 38). In order to reflect a constant periodic rate of return, the "effective interest rate" method should be used.

Thus, for a finance lease, the lessor will have to:

- determine the gross investment in the lease (lease receivable) and its PV, so as to calculate the total amount of interest income to be recognised over the lease term (difference between the gross investment in the lease and its PV), and
- prepare the amortisation schedule to determine the amount of interest income to be recognised in each accounting period. It should be noted that, from the lessor's perspective, the income effect of a finance lease is just the finance income recognised in each accounting period. There will be no depreciation charge, as no fixed asset is recorded.

Illustration 12

On 1 January 20x1, SAW Leasing Ltd leased a piece of machinery to SEE Manufacturing Ltd. The terms of the lease agreement included: (i) a non-cancellable lease term of four years with no renewal or purchase option, and (ii) a lease rental of \$10,000 per year plus executory costs of \$1,000 per year to be paid by SEE Manufacturing Ltd on 31 December each year, commencing 31 December 20x1. The lease rental (after taking into account residual value of \$7,000 at the end of the lease, which is not guaranteed by any party) was determined based on a 10% rate of return to SAW Leasing Ltd. The machinery is new on 1 January 20x1 and is expected to have an estimated useful life of five years. At the end of the lease term, the machinery is to be returned to SAW Leasing Ltd.

In this case, the lease will be classified as a finance lease as it transfers substantially all the risks and rewards incidental to the ownership of the equipment to the lessee (because the lease term of four years is for the major part (equals or exceeds 75%) of the useful life of five years of the equipment).

Thus, SAW Leasing Ltd (the lessor) will have to perform two initial calculations, namely: (i) gross investment in the lease and its PV, and (ii) the amortisation schedule for interest income.

- (i) Calculation of the gross investment in the lease and its PV:

Gross investment: Ordinary annuity of \$10,000 for four periods plus unguaranteed residual value of \$7,000 at the end of the fourth period = \$47,000

Discount rate: 10%

PV: $\$10,000 \times 3.16986 + \$7,000 \times 0.68301 = \$36,480$.

- (ii) Amortisation schedule for finance income of \$10,520 (\$47,000 – \$36,480):

Date	Lease payment	Interest (10%)	Principal	Net Investment
	\$	\$	\$	\$
1 January 20x1				36,480
31 December 20x1	10,000	3,648	6,352	30,128
31 December 20x2	10,000	3,013	6,987	23,141
31 December 20x3	10,000	2,314	7,686	15,455
31 December 20x4	10,000	1,545	8,455	7,000
Total		10,520		

As shown in the amortisation schedule, there will be a net investment of \$7,000 at the end of the lease, which is the residual value of the asset under the lease.

The journal entries to record the lease in the books of SAW Leasing Ltd (the lessor) for each of the four years will be as follows:

1 January 20x1		
Dr Lease receivable	47,000	
Cr Unearned interest income		10,520
Cr Machinery		36,480
(to record the finance lease)		
31 December 20x1		
Dr Cash	1,000	
Cr Executory expenses payable		1,000
(to record receipt of executory costs)		
Dr Cash	10,000	
Cr Lease receivable		10,000
(to record receipt of lease payment)		
Dr Unearned interest income	3,648	
Cr Interest income		3,648
(to recognise interest income)		
31 December 20x2		
Dr Cash	1,000	
Cr Executory expenses payable		1,000
(to record receipt of executory costs)		
Dr Cash	10,000	
Cr Lease receivable		10,000
(to record receipt of lease payment)		
Dr Unearned interest income	3,013	
Cr Interest income		3,013
(to recognise interest income)		
31 December 20x3		
Dr Cash	1,000	
Cr Executory expenses payable		1,000
(to record receipt of executory costs)		
Dr Cash	10,000	
Cr Lease receivable		10,000
(to record receipt of lease payment)		
Dr Unearned interest income	2,314	
Cr Interest income		2,314
(to recognise interest income)		

31 December 20x4		
Dr Cash	1,000	
Cr Executory expenses payable		1,000
(to record receipt of executory costs)		
Dr Cash	10,000	
Cr Lease receivable		10,000
(to record receipt of lease payment)		
Dr Unearned interest income	1,545	
Cr Interest income		1,545
(to recognise interest income)		

At the end of the lease on 31 December 20x4, when the machinery is reverted to SAW Leasing Ltd, the following journal entry is recorded:

Dr Machinery	7,000	
Cr Lease receivable		7,000

To illustrate the technicality of the provisions of FRS 17 relating to accounting for finance lease from the lessor's perspective, the above-mentioned case of a finance lease between SAW Leasing Ltd and SEE Manufacturing Ltd will be amended to include a bargain purchase option, a bargain renewal option and residual value, and also amended such that the lease payment is in the form of annuity due instead of ordinary annuity. Each of the cases is to be considered independently. For simplicity, it is assumed that the implicit rate remains at 10% (unless specifically stated otherwise) in each of the following cases.

Bargain purchase option

The effects of the existence of a bargain purchase option are that (i) the lease will, by the fact that there is a bargain purchase option, be classified as finance lease, and (ii) the gross investment in the lease will be increased by the exercise price but reduced by the residual value which now becomes irrelevant.

Illustration 13

To illustrate a case of finance lease with a bargain purchase option, assume that in the original lease between SAW Leasing Ltd and SEE Manufacturing Ltd in Illustration 12 the lease agreement included a clause to give SEE Manufacturing Ltd (the lessee) an option to buy over the machinery at the end of the four year lease term for \$1,000, and that at the inception of the lease on 1 January 20x1 it was estimated that the fair market value of the equipment would be about \$7,000 after four years' usage.

Where the residual value is unguaranteed, FRS 17 requires that it should be reviewed regularly. If there is a permanent reduction in the estimated unguaranteed residual value, the income allocation over the lease term is to be revised, and any reduction in respect of the amount already accrued is charged to income immediately (para 41). It should be noted that FRS 17 requires "current" adjustments for the cumulative effect of the permanent decline in the estimated unguaranteed residual value as opposed to "prospective" adjustments required under FRS 8 relating to changes in accounting estimates in general. However, upward adjustments in the estimated residual value are not recognised.

Illustration 17

To illustrate the provision of para 41 of FRS 17, refer to the original lease between SAW Leasing Ltd and SEE Manufacturing Ltd in Illustration 12. Assume that on 1 January 20x3, due to technological changes, it is estimated that the unguaranteed residual value will be only \$2,300 (instead of the original estimate of \$7,000) at the end of the lease term.

Due to the permanent decline in the estimated unguaranteed residual value, FRS 17 requires that the income allocation over the lease term be revised, and the retrospective effect of the decline be charged to the current year's P&L account.

It should also be noted that, due to the decline in the gross investment in the lease from \$47,000 to \$42,300 (with the net investment (or FV of the machinery) remaining unchanged at \$36,480), the implicit rate of return to the lessor would be reduced. The revised implicit rate of return is the discount rate that causes the PV of the gross investment of \$42,300 to be equal to \$36,480. It can be determined that the revised implicit rate is 6%.

- (i) Calculation of the revised gross investment in the lease and its PV:

Gross investment: Ordinary annuity of \$10,000 for four periods plus unguaranteed residual value of \$2,300 at the end of the fourth period = \$42,300

Discount rate: 6%

PV: $\$10,000 \times 3.46511 + \$2,300 \times 0.79209 = \$36,480$ (rounded).

- (ii) Revised amortisation schedule for finance income of \$5,820 ($\$42,300 - \$36,480$):

Date	Lease payment	Interest (6%)	Principal	Net Investment
	\$	\$	\$	\$
1 January 20x1				36,480
31 December 20x1	10,000	2,188	7,812	28,668
31 December 20x2	10,000	1,718	8,282	20,386
31 December 20x3	10,000	1,221	8,779	11,607
31 December 20x4	10,000	693	9,307	2,300

As shown in the revised amortisation schedule, up to 1 January 20x3, a total interest income of \$3,906 (\$2,188 in 20x1 + \$1,718 in 20x2) should have been recognised. However, \$6,661 (\$3,648 for 20x1 + \$3,013 for 20x2, see original amortisation schedule in Illustration 12) of interest income has been recognised as at 1 January 20x3. Thus, an adjustment for the cumulative effect of "over-recognition" of interest income of

\$2,755 ($\$6,661 - \$3,906$) should be made and charged to the 20x3 P&L account. In addition, the lease receivable account should be reduced by \$4,700 (reduction in the estimated residual value from \$7,000 to \$2,300), and the unamortised interest income (that is the balance of the "unearned interest income" account) as at 1 January 20x3 should be reduced by \$1,945 ($\$2,314 + \$1,545 - (\$1,221 + \$693)$). Thus, the adjustment journal entry required on 1 January 20x3 to account for the permanent decline in the estimated unguaranteed residual value is as follows:

Dr Loss on decline in residual value	2,755	
Dr Unearned interest income	1,945	
Cr Lease receivable		4,700

Annuity due

It is not uncommon in practice for the lease agreement to provide for the first periodic lease payments to be made at the beginning of the period (annuity due) rather than at the end of the period (ordinary annuity). Financially, the difference between annuity due and ordinary annuity is that in the former case the lessor is financing the lessee for a smaller amount, and, therefore, the finance income should correspondingly be reduced.

Illustration 18

To illustrate a lease with annuity due payments instead of ordinary annuity payment, assume that in the original lease between SAW Leasing Ltd and SEE Manufacturing Ltd in Illustration 12 the lease agreement provides that each annual lease payment is to be made on 1 January (instead of 31 December), commencing with the first payment on 1 January 20x1 (instead of 31 December 20x1).

In this case, the lease will still be classified as a finance lease. SAW Leasing Ltd (the lessor) will have to perform two initial calculations, namely: (i) gross investment in the lease and its PV, and (ii) the amortisation schedule for interest income.

- (i) Calculation of the gross investment in the lease and its PV:

Gross investment: Annuity due of \$10,000 for four periods plus unguaranteed residual value of \$7,000 at the end of the fourth period = \$47,000

Discount rate: 10%

PV: $\$10,000 \times 3.48685 + \$7,000 \times 0.68301 = \$39,650$.

Date	Lease payment	Interest (6%)	Principal	Net Investment
	\$	\$	\$	\$
31 December 20x4	27,295	4,377	22,918	50,040
31 December 20x5	27,295	3,002	24,293	25,747
31 December 20x3	27,295	1,548	25,747	Nil

The journal entries to record the sales-type lease for the first two years are as follows:

1 January 20x2				
Dr Lease receivable		136,475		
Dr Cost of goods sold		100,000		
Cr Sales				114,975
Cr Stock				100,000
Cr Unearned interest				21,500
31 December 20x2				
Dr Cash		27,295		
Cr Lease receivable				27,295
Dr Unearned interest		6,898		
Cr Interest income				6,898
31 December 20x3				
Dr Cash		27,295		
Cr Lease receivable				27,295
Dr Unearned interest		5,675		
Cr Interest income				5,675

Note that in Illustration 19, where the fair interest rate was charged in the computation of the annual lease payment, the sale was recorded based on the fair market value of the machinery of \$125,000. Consequently, the total profit of \$48,375 was apportioned into a gross profit of \$25,000 (difference between the cash sale price and the cost of sales) and an interest income of \$23,375 (a 6% return on gross investment of \$148,375).

In Illustration 20, where an artificially low interest rate is charged, the total profit is reduced to \$36,475. In accordance with the provisions of FRS 17, the reduction should be treated as a sales discount. The gross profit is reduced while the effective interest income remains constant. This is done by simply recording the sales at the PV of the gross investment (instead of the cash sale price). In this

case, the total profit of \$36,475 is consequently apportioned as follows: gross profit of \$14,975 (the reduced sale price of \$114,475 less the cost of sales of \$100,000), and interest income of \$21,500 (a 6% return on gross investment of \$136,475).

It may be noted that, in a sales-type lease, the initial direct costs should be recognised as an expense in the P&L account at the inception of the lease (para 42).

Footnotes:

- 1 With the reduction in the implicit rate to 3%, the annual lease payment will be reduced to only \$27,295 ($\$125,000 \div 4.57971$, which is the PV factor of ordinary annuity for five periods at 3%).

SALE AND LEASEBACK

¶ 17-600 Sale and leaseback

A sale and leaseback transaction is one in which the owner of an asset sells the asset to another party and immediately leases it back.

In practice, sale and leaseback transactions are normally entered into by a seller/lessee to solve cash flow problems. The seller-lessee receives a lump sum for the sales proceeds when the asset is sold, but will only need to pay lease rentals periodically under the lease, while maintaining the right to use the same asset.

¶ 17-610 Recognition of gains and losses

The main accounting problems relating to a sale and leaseback transaction are encountered in the seller-lessee's books.

There are two main issues involved:

- Where the sale price is fixed at the fair market value, how the profit or loss (P/L) on the sales transaction should be accounted for, and
- Where the sales price is artificially fixed lower or higher than the fair market value so as to accommodate a lower-or-higher-than-market lease rental, how the P/L on the initial sales and subsequent rental or leasing of the asset should be accounted for (in practice, it is common for the sales price to be artificially fixed, ie not based on the FV, and the lease rental to be also artificially fixed, as a package deal, to accommodate the cash flow needs of the seller-lessee).

Selling price is fixed at fair market value

The treatment for the P/L on the "sales" transaction depends very much on the nature of the leaseback transaction.

Dr Deferred gain	200,000	
Cr Realised gain (to amortise deferred gain over 15 years)		200,000
Dr Depreciation expense	1,200,000	
Cr Accumulated depreciation (to record depreciation over 15 years)		1,200,000

FRS 17 merely provides that the deferred gain/loss should be amortised over the lease term (para 59). It does not prescribe how the amortised gain/loss should be treated in the statement of P/L and other comprehensive income (OCI) and how the unamortised balance should be treated in the statement of financial position.

On the other hand, FASB Statement No 13 requires the deferred gain/loss to be amortised over the life of the leased asset or over the lease term, whichever is more appropriate. FASB Statement No 13 further provides that the amortised gain/loss should be treated as an adjustment to the depreciation expense in the statement of P/L and OCI, and the unamortised deferred gain/loss should be treated as part of the valuation of the leased asset in the statement of financial position. This procedure will increase/reduce the depreciation expense and the book value of the leased asset to the original cost basis.

Illustration 23

Refer to the case in Illustration 22.

Under FASB Statement No 13, the 1 January 20x6 journal entries will be the same as those previously shown, but the 31 December 20x6 journal entries will be as follows:

31 December 20x6		
Dr Lease Liability	566,500	
Dr Interest Expense	1,800,000	
Cr Cash (annual lease payment)		2,366,500
Dr Deferred gain	200,000	
Cr Depreciation expense (to amortise deferred gain over 15 years)		200,000
Dr Depreciation expense	1,200,000	
Cr Accumulated depreciation (to record depreciation of leased asset over 15 years)		1,200,000

It may be noted that under FASB Statement No 13, the amount of depreciation expense charged to the 20x6 statement of P/L and OCI will be \$1,000,000 (\$1,200,000 – \$200,000), the same amount as it would have been without the sale and leaseback transaction.

Also, the asset will be carried in the 20x6 statement of financial position at a book value of \$14,000,000 (capitalised amount of \$18,000,000 less A/D of \$1,200,000 less unamortised gain of \$2,800,000), the same amount as it would have been, without the sale and leaseback transaction (cost of \$20,000,000 less A/D of \$6,000,000).

Selling price is artificially fixed

Where the selling price is fixed artificially lower or higher than the fair market value so as to accommodate a lower-or-higher-than-market lease rental, the issue of recognising the P&L is slightly more complicated.

Operating lease

If the selling price is artificially fixed above the FV to accommodate a higher-than-market lease rental, FRS 17 provides that the excess over the FV should be deferred and amortised over the period for which the asset is expected to be used (para 61).

Thus, in such a case, the P/L arising from the sales transaction should be apportioned between two parts: the excess of the selling price over the FV should be deferred and amortised, and the difference between the FV and the carrying amount (book value) of the asset should be recognised immediately.

Illustration 24

Case A

Assume that an asset is carried in the books at \$70 but has an FV of \$100, and that in a sale and leaseback transaction the sales price is fixed at \$150 to accommodate a higher-than-market lease payment under the leaseback.

In this case, out of the profit of \$80 (sales price of \$150 less book value of \$70), \$50 (sales price of \$150 less FV of \$100) should be deferred and amortised over the period for which the asset is expected to be used, and \$30 (FV of \$100 less book value of \$70) should be recognised immediately.

Case B

If the asset's book value is \$120 (instead of \$70), then, out of the profit of \$30 (sales price of \$150 less book value of \$120), a profit of \$50 (sales price of \$150 less FV of \$100) should be deferred and amortised over the period for which the asset is expected to be used, and a loss of \$20 (FV of \$100 less book value of \$120) should be recognised immediately.

In this case, simply deferring the recognition of the profit of \$30 would not be in compliance with para 63 (which provides that a loss equal to the amount of the difference between the carrying amount and the FV should be recognised immediately if the FV at the time of the sale and leaseback transaction is less than the carrying amount of the asset).

Case C

If the asset's book value is \$190, then, out of the loss of \$40 (sales price of \$150 less book value of \$190), a profit of \$50 (sales price of \$150 less FV of \$100) should be deferred and amortised over the period for which the asset is expected to be used under para 61, and a loss of \$90 (FV of \$100 less book value of \$190) should be recognised immediately under para 63.

On the other hand, if the selling price is artificially fixed at below the FV to accommodate a lower-than-market lease rental, FRS 17 provides that any P/L should be deferred and amortised in proportion to the lease payments over the period for which the asset is expected to be used (para 61).

Paragraph 61 also provides that if the loss is not compensated by future rentals at below the market price, it should be recognised immediately.

Illustration 25**Case A**

Assume that an asset is carried in the books at \$260 but has an FV of \$200, and that in a sale and leaseback transaction the sale price is fixed at \$100 to accommodate a lower-than-market lease payment under the leaseback.

In this case, out of the loss of \$160 (sales price of \$100 less book value of \$260), \$100 (sales price of \$100 less FV of \$200) should be deferred and amortised over the period for which the asset is expected to be used under para 61, and \$60 (FV of \$200 less book value of \$260) should be recognised immediately under para 63. In this case, deferment of the total \$160 loss would not be in compliance with the provision of para 63.

Case B

If the asset's book value is \$160 (instead of \$260), then the loss of \$60 (sales price of \$100 less book value of \$160), should be deferred and amortised over the period for which the asset is expected to be used. The profit of \$40 (FV of \$200 less book value of \$160) is not recognised.

Case C

If the asset's book value is \$60, then the profit of \$40 (sales price of \$100 less book value of \$60) should be recognised immediately. The loss of \$100 (sales price of \$100 less FV of \$200) is not recognised.

Finance lease

Where the leaseback transaction is a finance lease, the whole of the difference between the sales proceeds and the carrying amount (book value) should be deferred and amortised over the lease term (para 59).

Note that the provisions of para 63 would not be applicable to finance leases. However, if there has been impairment in the value, which is not temporary in nature, the carrying value of the asset should be written down to its recoverable amount, in accordance with the provisions of FRS 36.

Appendix to FRS 17

The Appendix of FRS 17 provides a summary of its requirements in respect of recognising gains and losses arising from sale and leaseback transactions that result in operating leases.

A sale and leaseback transaction that results in an operating lease may give rise to profit or a loss, the determination and treatment of which depends on the leased asset's carrying amount, FV and selling price. The following table shows the requirements of the Standard in various circumstances:

Sale price established at FV (para 61)	Carrying amount equal to FV	Carrying amount less than FV	Carrying amount above FV
<i>Profit</i>	No profit	Recognise profit immediately	Not applicable
<i>Loss</i>	No loss	Not applicable	Recognise loss immediately

Sale price established below FV (para 61)	Carrying amount equal to FV	Carrying amount less than FV	Carrying amount above FV
<i>Profit</i>	No profit	Recognise profit immediately	No profit ¹
<i>Loss not compensated by future lease payments at below market price</i>	Recognise loss immediately	Recognise loss immediately	(Note 1) ¹
<i>Loss compensated by future lease payments at below market price</i>	Defer and amortise loss	Defer and amortise loss	See note 1 ¹

Sale price established above FV (para 61)	Carrying amount equal to FV	Carrying amount less than FV	Carrying amount above FV
<i>Profit</i>	Defer and amortise profit	Defer and amortise excess profit ²	Defer and amortise profit ³
<i>Loss</i>	No loss	No loss	(Note 1) ¹

Footnotes:

- 1 **Note 1:** These parts of the table represent circumstances that would have been dealt with under para 63 of the Standard. Paragraph 63 requires the carrying amount of an asset to be written down to FV where it is subject to a sale and leaseback.

Further, para 57 of FRS 17 requires, for assets leased out under operating leases, the disclosure of:

- the gross carrying amount
- the A/D
- the accumulated impairment losses
- the depreciation charge for the period
- the impairment losses recognised for the period, and
- the impairment losses reversed for the period.

Finance leases

For finance leases, FRS 17 requires the lessors to disclose principally an analysis of the lease receivable and a general description of the lease arrangements.

Specifically, para 45 of FRS 17 requires the disclosure of:

- a reconciliation between the gross investment in the lease at the statement of financial position date and the PV of the minimum lease payments receivable at the statement of financial position date
- the total gross investment in the lease and the PV of the minimum lease payments receivable at the statement of financial position date, for each of the following periods:
 - Not later than one year
 - Later than one year but not more than five years, and
 - Later than five years.
- unearned finance income
- the unguaranteed residual values accruing to the benefit of the lessor
- the accumulated allowance for uncollectible lease receivable
- contingent rents recognised in income for the period, and
- a general description of significant leasing arrangements.

COMPARISON WITH IASB STANDARD

¶17-800 Comparison with IASB standard

FRS 17 is based on IAS 17 *Leases* issued by International Accounting Standards Board (IASB).

In the past, there was a major difference between FRS 17 and IAS 17. IAS 17 disallowed a leasehold land to be classified as a finance lease unless title passes to the lessee at the end of the lease term. FRS 17, on the other hand, provided that leasehold land should be classified as operating or finance lease in the same way as leases of other assets.

In April 2009, IASB amended IAS 17 effective for annual periods beginning on or after 1 January 2010 in its "Improvement to IFRS", under which it deleted the paragraph that disallowed a leasehold land to be classified as a finance lease unless title passes to the lessee at the end of the lease term. Thus, effective 1 January 2010, there were no longer any significant differences between FRS 17 and IAS 17.

APPENDIX A: TWO RELATED STANDARDS

¶17-900 Appendix A: Two related standards

In accounting for leases, three accounting standards should be considered. Where there is a lease, both legally and in substance, FRS 17 should be applied; where there is legally a lease, but not a lease in substance, INT FRS 27 should be applied; and where there is legally no lease, but there is a lease in substance, INT FRS 104 should be applied.

This Appendix discusses the two INT FRSs.

¶17-910 INT FRS 27

NOTE: INT FRS 27 will be superseded by FRS 116 *Leases* (see chapter on FRS 116) effective for annual periods beginning on or after 1 January 2019.

The Accounting Standards Council (ASC) has issued INT FRS 27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*, which is operative on 1 February 2003.

INT FRS 27 addresses the accounting issue relating to a transaction or a series of structured transactions (an arrangement) between an entity and an unrelated party that involves the legal form of a lease.

An entity may enter into a transaction or an arrangement with an unrelated party that involves a lease in legal form, but which may not be a lease in substance. For example, an entity sells its asset and immediately leases the same asset back. The form of these sale and leaseback transactions and their terms and conditions may vary significantly. Some of these sale and leaseback transactions may actually involve a genuine sales transaction and a genuine leasing transaction, however, some may merely be financing arrangements in substance.

INT FRS 27 provides that a series of transactions that involve the legal form of a lease is linked and should be accounted for as one transaction when the overall economic effect cannot be understood without reference to the series of transactions as a whole. This is the case, for example, when the series of transactions is closely interrelated, negotiated as a single transaction and takes place concurrently or in continuous sequence.

¶37-500 Comparison with IASB standard

FRS 37 is based on IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*. There are no significant differences between FRS 37 and IAS 37. Compliance with FRS 37 will ensure compliance with IAS 37.

The International Accounting Standards Board (IASB) has issued an exposure draft to amend IAS 37. One of the major changes proposed is to treat "probability" as a measurement basis, instead of a recognition criterion.

Illustration 13

Assume that ABC Ltd (the Company) is being sued for breach of patent right and asked to pay a damage of \$10 million.

Scenario I

Assume that the company lawyer advises that there is a 60% chance that the Company will have to pay \$10 million. In this case, under the existing IAS 37, because the loss is probable, the Company will have to recognise a provision. (IAS 37 does not spell out clearly whether the amount provided for should be \$10 million or \$6 million (60% × \$10 million)). Under the forthcoming IAS 37, the company will have to make a provision of \$6 million (60% × \$10 million).

Scenario II

Assume that the company lawyer advises that there is a 30% chance that the Company will have to pay \$10 million.

In this case, under the existing IAS 37, because the loss is not probable, the company will not recognise a provision. (The event will be disclosed as a "contingent liability" in the notes to the financial statements.)

Under the forthcoming IAS 37, the company will have to make a provision of \$3 million (30% × \$10 million).

It may be noted that even though IAS 37 has not been revised, the new rule that "probability" should affect measurement (and not recognition) has been applied by IASB in many accounting issues, for example, accounting for a guarantee liability under IAS 39 and accounting for contingent consideration in a business combination under the revised IFRS 3.

In January 2010, a second exposure draft on proposed amendments to IAS 37 was issued. In subsequent deliberations, the IASB has proposed that the terms "provision", "contingent liability" and "contingent asset" be eliminated. It is likely that the new replacement standard for IAS 37 would refer simply to "liabilities". It would exclude warranty costs which would be addressed instead in the new upcoming standard on revenue recognition — *Revenue from Contracts with Customers*.

¶37-600 Appendix

This Appendix presents: (i) a framework on the accounting treatment for provisions and contingent liabilities, and (ii) a short case study.

Framework

	Amount can be reliably measured	Amount cannot be reliably measured
Probable	Accrue (as a "provision" if there is an obligation)	Disclose
Possible	Disclose	Disclose
Remote	Ignore	Ignore

Case study

On 20 January 20x2, NumberOne Restaurant (No.One) was sued by two customers, Mr A and Mr B, for food poisoning arising from the consumption of No.One's cooked food. Mr A alleged that the food poisoning was related to the food he consumed at No.One on 26 December 20x1 and Mr B alleged that the food poisoning was related to the food he consumed at No.One on 10 January 20x2. On 1 February 20x2, No.One paid Mr A and Mr B \$200,000 and \$300,000 respectively, in out-of-court settlements. No.One has adopted a 31 December accounting year end.

For the case of Mr A, the obligating event (food poisoning) has occurred before 31 December 20x1, (and given that it is probable and the amount can be reliably estimated), a provision should be made in respect of the year 20x1. The journal entry is as follows:

Dr Other losses	200,000	
Cr Provision for loss		200,000

For the case of Mr B, the obligating event (food poisoning) has not occurred as at 31 December 20x1, and it is therefore not appropriate to account for the provision in respect of the year 20x1. (The loss of \$300,000 will then be charged to the 20x2 statement of profit or loss and other comprehensive income when paid.)

It may be noted that, in both the above-mentioned cases, the obligating event is "food poisoning". The act of suing is just a confirmatory event which adds to the probability. If there is "food poisoning" but no "suing", there is still an obligating event, except that the "probable" test may not be met, and consequently, no "provision" would be made.

Note that the above-mentioned cases may also be analysed under FRS 10 *Events after the Reporting Period* and it may be noted that the same accounting treatments will be required. Under FRS 10, the case involving Mr A will be an "adjusting" event and the loss of \$200,000 charged to the 20x1 statement of P/L. However, the case involving Mr B will be a "non-adjusting event" which merely requires disclosure (nature and financial effect) in the notes to the financial statements for 20x1.

benefits flowing from the underlying resource and to restrict the access of others to those benefits (para 13).

Thus, FRS 38 specifically provides that internally generated goodwill, brands, mastheads, publishing titles, customer lists and items similar in substance should not be recognised as assets (para 48 and 63).

Examples of other expenditure that will not give rise to an intangible asset to be recognised in the financial statements are as follows (para 69):

- Expenditure on starting up an operation or a business (start-up costs)
- Expenditure on training
- Expenditure on advertising and promotion, and
- Expenditure on relocating or reorganising part or all of an enterprise.

Generally, to assess whether an internally generated intangible asset meets the criteria for recognition, FRS 38 requires an entity to classify the generation of the asset into: (i) a research phase, and (ii) a development phase (para 52).

FRS 38 provides that all expenditure on research or during the research phase of an internal project should be written off as an expense when incurred, and no intangible asset should be recognised (para 54).

As for expenditure on development or during the development phase of an internal project, FRS 38 provides that it should be capitalised as an intangible asset if, and only if, the enterprise can demonstrate all of the following (para 57):

- Technical feasibility of completion
- Intention to complete
- Ability to use or sell the asset
- Generation of probable future economic benefits
- Availability of adequate resources to complete and to use or sell, and
- Development expenditure attributable to the asset can be measured reliably.

¶38-220 Separately-acquired intangible assets

For separately-acquired intangible assets, FRS 38 provides that the probability criterion is always considered to be satisfied (para 25), and that the cost can be usually be measured reliably (para 26).

Normally, the price an enterprise pays to acquire an intangible asset reflects expectations about the probability that the expected future economic benefits embodied in the asset will flow to the enterprise.

Further, since there is a transaction, the measurement issue will also be overcome.

Thus, most of the acquired intangible assets will be recognised as intangible assets under FRS 38.

¶38-230 Intangible assets acquired in a business combination

For intangible assets acquired in a business combination, FRS 38 provides that the probability criterion is always considered to be satisfied (para 33). However, measurement for individual intangible assets may be an issue.

Thus, FRS 38 provides that an entity should recognise an intangible asset acquired in a business combination separately from goodwill if the asset's FV can be measured reliably, irrespective of whether the asset had been recognised by the acquiree before the business combination (para 34).

FRS 38 further provides that the FV of intangible assets acquired in business combinations can normally be measured with sufficient reliability to be recognised separately from goodwill, especially if the acquired intangible assets have finite useful lives (para 35).

FRS 38 specifically provides that an in-process research and development (R&D) project of the acquiree should be recognised as an intangible asset separately from the goodwill if the project meets the definition of an intangible asset and its FV can be measured reliably (para 34).

INITIAL MEASUREMENT

¶38-300 Initial measurement

FRS 38 provides that an intangible asset should be measured initially at cost (para 24).

¶38-310 Internally generated intangible assets

FRS 38 provides that the cost of an internally generated intangible asset is the sum of expenditure incurred from the date when the intangible asset first meets the recognition criteria (para 65).

Further, as previously mentioned, FRS 38 para 71 prohibits expenditure that has been initially recognised as an expense in previous annual financial statements or interim financial reports to be recognised as part of the cost of an intangible asset at a later date.

value of \$13 million, but revalued it downwards to \$11 million on 31 December 20x5 and to \$9 million on 31 December 20x7.

In this case, the revaluation surplus of \$3 million in 20x3 should be credited to a non-distributable reserve, "revaluation reserve", the deficit on revaluation of \$2 million in 20x5 should be charged against the revaluation reserve, and of the revaluation deficit of \$2 million in 20x7, \$1 million should be charged to the revaluation reserve and the other \$1 million charged to the 20x7 income statement.

Scenario B

Assume that on 1 January 20x2, XYZ Ltd (with 31 December accounting year ends) capitalised an intangible asset with indefinite life at a cost of \$20 million. Assume further that, on 31 December 20x4, XYZ Ltd revalued its intangible asset downwards to its market value of \$18 million, and on 31 December 20x6, revalued it upwards to its market value of \$21 million.

In this case, the deficit on revaluation of \$2 million in 20x4 should be charged to the 20x4 income statement. Of the revaluation surplus of \$3 million in 20x6, \$2 million should be credited to the 20x6 income statement and the remaining \$1 million credited to a non-distributable reserve, "revaluation reserve".

Note that FRS 36 *Impairment of Assets* (para 124) prohibits the reversal of impairment loss recognised for goodwill in a subsequent period. This is because any subsequent increase in recoverable amount of goodwill after an impairment is likely to be an increase in internally generated goodwill (FRS 36 para 125).

Depending on whether the useful life of an intangible asset is finite or indefinite, the subsequent accounting treatment will defer.

Specifically, an intangible asset with finite life will be subjected to amortisation and the impairment test, while an intangible asset with indefinite useful life will not be subjected to amortisation but will be subjected to a more vigorous impairment test. An enterprise applies FRS 36 to determine when to recognise or reverse an impairment loss on an intangible asset and how to measure the impairment loss (para 111).

Thus, it is important, as required by para 88 of FRS 38, that an entity should assess whether the useful life of an intangible asset is finite or indefinite.

It may be noted that FRS 38 requires an intangible asset to be regarded as having an indefinite useful life when, based on the analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for an entity (para 88).

FRS 38 further provides that the useful life of an intangible asset that has been assessed to be indefinite (and hence, not amortised) should be reviewed each period to determine whether events and circumstances continue to support an indefinite useful life assessment of that asset. If they do not, the change in the

useful life assessment from indefinite to finite life should be accounted for as a change in accounting estimate in accordance with FRS 8 (para 109). FRS 38 para 110 further requires that, in this case, the entity test the intangible asset for impairment in accordance with FRS 36.

¶ 38-410 Amortisation

FRS 38 provides that intangible assets with indefinite useful lives should not be amortised (para 107).

For intangible assets with finite useful lives, however, FRS 38 provides that its depreciable amount (ie cost or revalued amount less residual value) should be amortised on a systematic basis over its useful life (para 97).

Thus, the discussion here is only applicable to intangible assets with finite useful lives (whether carried at cost or at revalued amount), and not applicable to intangible assets with indefinite useful lives.

Amortisation should commence when the asset is available for use and cease when the asset is derecognised or when the asset is classified as held for sale, if earlier (para 97).

FRS 38 also requires that the amortisation method used should reflect the pattern in which the asset's economic benefits are consumed by the enterprise. If that pattern cannot be determined reliably, the straight line method should be adopted (para 97).

In the *Amendment to FRS 16 and FRS 38* (2014), which is effective for annual periods beginning on or after 1 January 2016, FRS 38 is amended to provide that amortisation method based on "revenue" is not appropriate, unless the useful life of the underlying intangible asset is limited by revenue (para 98A).

The amortisation charge should be recognised as an expense unless another FRS permits or requires it to be included in the carrying amount of another asset (para 97).

For the purposes of determining the depreciable amount, FRS 38 specifies that the residual value of an intangible asset is assumed to be zero unless there is either a commitment by a third party to purchase the asset at the end of its useful life or an active market by which its residual value can be determined and it is probable that this market will exist at the end of the asset's useful life (para 100).

FRS 38 requires the amortisation period and the amortisation method to be reviewed at least at each financial year end (para 104). Any change to the amortisation period and amortisation method should be accounted for as change in accounting estimate in accordance with FRS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

The following example illustrates the provisions of FRS 38 in relation to amortisation of intangible assets:

Illustration 3

Assume that DEF Ltd has capitalised \$12 million of development costs as at 31 December 20x1. DEF Ltd expects the net profit from the sale of the newly developed product to be approximately \$15 million, of which 50% will be earned in 20x2, 30% in 20x3 and 20% in 20x4.

In this case, the development costs should be amortised in a manner such that \$6 million will be charged to the 20x2 profit and loss (P&L) account, \$3.6 million to the 20x3 P&L account and \$2.4 million to the 20x4 P&L account.

¶38-420 Impairment

FRS 38 requires all intangible assets (whether with finite or indefinite useful lives, and whether carried at cost or at revalued amount) to be subjected to the impairment test.

Intangible assets with finite useful lives, however, are subjected to the impairment test only whenever there is indication that the asset may be impaired, whereas intangible assets with indefinite useful lives should be subjected to the impairment test at least annually and whenever there is indication that the asset may be impaired (para 108).

To assess whether an intangible asset may be impaired, an enterprise applies FRS 36 *Impairment of Assets*.

FRS 36 also requires the reversal of impairment loss for all intangible assets other than goodwill accounted for under FRS 38.

The following examples illustrate the provisions of FRS 36 in relation to impairment of intangible assets:

Illustration 4

In August 20x4, ABC Ltd pays \$15,000,000 to acquire the business of another company. Assume that, the net identifiable assets acquired include an intangible asset (Brand) which has an FV of \$3,000,000 at the date of acquisition.

Assume that, in 20x6, because of adverse press reports, the Brand is deemed to have a recoverable amount of only \$1,000,000.

In this case, the Brand is deemed to be impaired and an impairment loss of \$2,000,000 has to be written off and charged against ABC's 20x6 income statement.

Assume further that the press reports are subsequently found to be untrue and the recoverable amount of the Brand increases to \$2,500,000 in 20x8.

In this case, there is a reversal of impairment in 20x8 and a gain of \$1,500,000 will be credited to ABC's 20x8 income statement.

Illustration 5

Assume that LMN Ltd has capitalised \$15,000,000 of development costs as at 31 December 20x1. LMN Ltd expects the recoverable amount from the sale of the new product to be approximately \$20,000,000, and the amount is to be earned evenly from 20x2 to 20x6. Assume further that as at 1 January 20x3 (after the amortisation charge of \$3,000,000 for 20x2 has been made, and when the unamortised amount, therefore, stands at \$12,000,000), it is expected that, due to changes in the market conditions, the recoverable amount in the future will only be \$10,000,000 (to be earned evenly from 20x3 to 20x6).

In this case, a write-down of \$2,000,000 (\$12,000,000 – \$10,000,000) is necessary. This impairment loss should be charged to the 20x3 income statement. Note that the amortisation charge for 20x3 will be \$2,500,000 (\$10,000,000 ÷ 4), whilst the amortisation charge for 20x2 was \$3,000,000 (\$15,000,000 ÷ 5).

The journal entry for the impairment loss in 20x3 is as follows:

Dr Impairment loss	2,000,000	
Cr Accumulated impairment		2,000,000

Illustration 6

Refer to the case of LMN Ltd in Illustration 5.

Assume that as at 1 January 20x5, (when the unamortised amount stands at \$5,000,000), it is expected that, due to changes in the market conditions, the original forecasted recoverable amount of \$20,000,000 is attainable, and that \$4,000,000 is expected to be recovered in each of the years 20x5 and 20x6.

In this case, the write-down of \$2,000,000 in 20x3 should be reinstated. However, the amortisations for 20x3 and 20x4 have each been reduced by \$500,000 (\$3,000,000 – \$2,500,000) due to the write-down in 20x3. Thus, the write-back in this case, which should be credited to the 20x5 income statement, would be \$1,000,000 (\$2,000,000 – \$500,000 × 2). After the reinstatement, the amortisation charges for 20x5 and 20x6 would each be \$3,000,000 ((\$5,000,000 + \$1,000,000) ÷ 2), the same amount as that before the write-down.

The journal entry to record the reinstatement of impairment in 20x5 is as follows:

Dr Accumulated impairment	2,000,000	
Cr Accumulated amortisation		1,000,000
Cr Write-back of impairment loss		1,000,000

¶38-500 Retirements and disposals

FRS 38 provides that an intangible asset should be derecognised on disposal or when no future economic benefits are expected from its use and subsequent disposal (para 112).

Gains and losses arising from the retirement or disposal of an intangible asset should be determined as the difference between the net disposal proceeds and the carrying amount of the asset and should be recognised in income statement (para 113).

¶38-600 Disclosures

FRS 38 requires the following disclosure for each class of intangible assets, distinguishing between internally generated intangible assets and other intangible assets (para 118):

- Whether the useful lives are finite or indefinite, and if finite, the useful lives or the amortisation rates used
- The amortisation methods used for intangible assets with finite useful lives
- The gross carrying amount and the accumulated amortisation (aggregated with accumulated impairment losses) at the beginning and end of the period
- The line item(s) of the income statement in which the amortisation of intangible assets is included, and
- A reconciliation of the carrying amount at the beginning and end of the period showing—
 - additions, indicating separately those from internal development, those acquired separately and those acquired through business combinations
 - assets classified as held for sale and other disposals
 - increases or decreases during the period resulting from revaluations and from impairment losses recognised or reversed directly in equity
 - impairment losses recognised in the income statement during the period under FRS 36
 - impairment losses reversed in the income statement during the period under FRS 36
 - any amortisation recognised during the period
 - net exchange differences arising on the translation of the financial statements of a foreign entity, and
 - other changes in the carrying amount during the period.

A class of intangible assets is a grouping of assets of a similar nature and used in an enterprise's operations. Examples of separate classes may include: brand names; mastheads and publishing titles; computer software; licences and franchises;

copyrights, patents and other industrial property rights, service and operating rights; recipes, formulae, models, designs and prototypes; and intangible assets under development (para 119).

FRS 38 further requires the financial statements to disclose (para 122):

- for an intangible asset assessed as having an indefinite useful life, the carrying amount of that asset and the reasons supporting the assessment of an indefinite useful life
- a description, the carrying amount and remaining amortisation period of any individual intangible asset that is material to the entity's financial statements
- for intangible assets acquired by way of a government grant and initially recognised at FV—
 - the FV initially recognised for these assets
 - their carrying amounts, and
 - whether they are measured using the cost model or the revaluation model.
- the existence and carrying amounts of intangible assets whose title is restricted and the carrying amounts of intangible assets pledged as security for liabilities, and
- the amount of contractual commitments for the acquisition of intangible assets.

For intangible assets that are carried at revalued amounts, FRS 38 requires the following additional disclosures (para 124):

- By class of intangible assets—
 - the effective date of the revaluation
 - the carrying amount of revalued intangible assets, and
 - the carrying amount that would have been included in the financial statements had the revalued intangible assets been measured using the cost model.
- The amount of the revaluation surplus that relates to intangible assets at the beginning and end of the period, indicating the changes during the period and any restrictions on the distribution of the balance to shareholders, and
- The methods and significant assumptions applied in estimating the assets' FVs.

For R&D expenditure, FRS 38 requires the financial statements to disclose the aggregate amount of R&D expenditure recognised as an expense during the period (para 126).

¶38-700 Transitional provisions

FRS 38 is operative for annual periods beginning on or after 1 July 2004.

FRS 38 should be applied prospectively (para 129). Thus, on the first day FRS 38 is adopted, an entity should not adjust the carrying amount of its recognised intangible assets.

Further, on the first day FRS 38 is adopted, an entity should reassess the useful lives of its recognised intangible assets. If, as the result of the reassessment, the entity changes its assessment of the useful life of an asset, that change should be accounted for as a change in accounting estimate in accordance with FRS 8 (para 129).

¶38-800 Comparison with IASB standard

FRS 38 is based on IAS 38 *Intangible Assets*. There are no significant differences between FRS 38 and IAS 38. Compliance with FRS 38 will ensure compliance with IAS 38.

¶38-900 Appendix A: INT FRS 32

The Accounting Standards Council (ASC) issued INT FRS 32 *Intangible Assets — Web Site Costs*, which was operative on 1 February 2003.

INT FRS 32 addresses the accounting issues relating to internal expenditure on the development and operation of an entity's own website for internal or external access: (i) whether the website is an internally generated intangible asset under FRS 36, and (ii) the appropriate accounting treatment of such expenditure.

An enterprise may incur internal expenditure on the development and operation of its own website for internal or external access. A web site designed for external access may be used for various purposes such as to promote and advertise an enterprise's own products and services, provide electronic services and sell products and services. A website designed for internal access may be used to store company policies and customer details and search relevant information. The stages of a website's development comprise: planning, application and infrastructure development, graphical design development and content development.

INT FRS 32 provides that an enterprise's own website that arises from development and is for internal or external access is an internally generated intangible asset that is subject to the requirements of FRS 38.

INT FRS 32 further provides that a website arising from development shall be recognised as an intangible asset if, and only if, in addition to complying with the general recognition requirements described in FRS 38 para 21, an enterprise can satisfy the requirements in FRS 38 para 57.

For example, expenditure on the planning stage of a website development, which is similar to the research phase in FRS 38 para 54 to 56, should be expensed when incurred.

On the other hand, expenditure on the application and infrastructure development stage, the graphical design stage and the content development stage, other than for advertisement and promotion purposes, should be recognised as an intangible asset when the expenditure can be directly attributed and is necessary to create, produce or prepare the website for it to be capable of operating in the manner intended by management.

Expenditure to develop content during the content development stage to advertise and promote an enterprise's own products and services should be expensed when incurred. Similarly, expenditure on the operating stage, which commences once development of a website is complete, should be expensed unless it meets the recognition criteria of FRS 38 para 18.

Illustration 15

Assume that P Ltd acquired S Ltd on 1 April 20x5.

P Ltd has 31 December year ends and provides for a full year's depreciation, on straight line basis, on assets in the year of acquisition and nil in the year of disposal.

On the date of acquisition, a piece of machinery of S Ltd acquired was deemed to have a FV of \$500,000 and a remaining useful life of five years, and the goodwill was consequently determined to be \$2,000,000.

Based on the above-mentioned valuation, the depreciation expense for the machinery was \$100,000 for the year ended 31 December 20x5. In the balance sheet as at 31 December 20x5, the machine and goodwill were carried respectively at \$400,000 and \$2,000,000.

During 20x6, P Ltd receives the results of a valuation study which concludes that the machinery actually had an FV of \$600,000 (instead of \$500,000) at the date of acquisition and therefore, the goodwill should have been \$1,900,000 (instead of \$2,000,000).

Scenario A

If the valuation study was received before 1 April 20x6 (within 12 months of the acquisition date), FRS 103 requires adjustments to be made to the carrying amount of the machine as if the adjusted FV had been applied from the date of acquisition, and the goodwill should also be adjusted.

The carrying amounts of the machine and goodwill as at 1 January 20x6 should therefore be adjusted to \$480,000 ($\$600,000 - (\$600,000 \div 5)$) and \$1,900,000 respectively.

Scenario B

If the valuation study was received after 1 April 20x6, FRS 103 requires that adjustment be accounted for as a correction of error.

Applying the requirements of FRS 8, the carrying amount of the machine as at 1 January 20x6 should be adjusted to \$480,000, and the difference of \$80,000 ($\$480,000 - \$400,000$) should be adjustment to the beginning retained profit (BRP). The goodwill will continue to be carried at \$2,000,000.

¶103-600 Step acquisition (Piecemeal acquisition)

A step acquisition (also commonly referred to as piecemeal acquisition) is an acquisition where control is achieved in stages through more than one exchange transaction.

In the case of step acquisition, FRS 103 provides that the acquirer should remeasure its previously held equity interest in the acquiree at its acquisition-date FV and recognise the resulting gain or loss, if any, in profit or loss (P/L) (para 42). Thus, on the date when control is achieved, the original equity interests will be accounted as if they were disposed of and reacquired.

Illustration 16**Scenario I**

In October 20x1, A Ltd purchases 10% of the shares in B Ltd at a cost of \$10 million, and classifies the shares as "investment in trading securities" under FRS 39. On its accounting year end on 31 December 20x1, when the market value of the shares is \$11 million, A Ltd remeasures the investment to \$11 million and recognises a profit of \$1 million in 20x1, in accordance with FRS 39.

On 1 April 20x2, A Ltd acquires control of B Ltd through the purchase of an additional 60% of the shares in B Ltd. At this date, the market value of the original 10% shares in B Ltd is \$13 million.

In this case, FRS 103 requires A Ltd to, at the group level, remeasure its 10% shareholding in B Ltd to \$13 million on 1 April 20x2 and recognise a profit of \$2 million in its profit for 20x2.

Scenario II

In October 20x1, C Ltd purchases 10% of the shares in D Ltd at a cost of \$10 million, and classifies the shares as "investment in available-for-sale securities" under FRS 39. On its accounting year ends on 31 December 20x1 and 20x2, when the market values of the shares are \$11 million and \$13 million, respectively, C Ltd remeasures the investment and recognises in its FV reserve, \$1 million in 20x1 and another \$2 million in 20x2, in accordance with FRS 39.

On 1 April 20x3, C Ltd acquires control of D Ltd through purchase of an additional 60% of the shares in D Ltd. At this date, the market value of the original 10% shares in D Ltd is \$14 million.

In this case, FRS 103 requires C Ltd to, at the group level, remeasure its 10% shareholding in D Ltd to \$14 million on 1 April 20x3 and recognise a total profit of \$4 million by recognising the \$1 million profit and reversing the \$3 million from FV reserve to profit.

Scenario III

In October 20x1, E Ltd purchases 30% of the shares in F Ltd at a cost of \$30 million. E Ltd classifies the shares as "investment in associate" and carries it at cost under FRS 28 (assuming E Ltd has subsidiaries and presents consolidated financial statements).

In November 20x2, E purchases another 10% of the shares in F Ltd at a cost of \$11 million.

On 1 April 20x3, E Ltd acquires control of F Ltd through purchase of an additional 20% of the shares in F Ltd. At this date, the market value of the 40% shares in F Ltd purchased in 20x1 and 20x2 is \$50 million.

In this case, FRS 103 requires E Ltd to, at the group level, remeasure its 40% shareholding in F Ltd to \$50 million on 1 April 20x3 and recognise a profit of \$9 million.

The following illustration illustrates the consolidation process involved in a case of step acquisition:

Illustration 17

On 1 January 20x1, PAR Ltd acquires a 20% interest in SUB Ltd for a cash consideration of \$5 million. The interest in SUB Ltd is accounted for as "Investment in associate" and carried at cost under FRS 28 (assuming PAR Ltd has subsidiaries and presents consolidated financial statements). At this date, SUB Ltd's balance sheet comprises share capital of \$10 million (comprising 10 million shares) and retained profit (RP) of \$10 million, and land of \$10 million (the market value of which is \$15 million) and cash of \$10 million.

On 31 December 20x3, when SUB Ltd's shares are traded at \$6 per share, PAR Ltd acquires control of SUB Ltd through purchase of an additional 50% interest in SUB Ltd for a cash consideration of \$30 million. At this date, SUB Ltd's balance sheet comprises share capital of \$10 million and RP of \$20 million, and land of \$10 million (the market value of which is \$30 million) and cash of \$20 million.

As required by FRS 103, PAR Ltd remeasures its investment in the original 20% of SUB Ltd to \$12 million (2 million shares \times \$6) and recognises a profit of \$7 million on 31 December 20x3.

On 31 December 20x3, PAR Ltd's balance sheet comprises share capital of \$50 million and RP of \$13 million, and investment in SUB of \$35 million and cash of \$28 million.

In the preparation of the 20x3 consolidated balance sheet for the PAR Ltd group, the following consolidation adjustments are required in relation to the step acquisition of SUB Ltd (assuming the NCI is measured based on the FV of the net identifiable assets of the subsidiary):

	\$'mil	\$'mil
Dr Investment in SUB	7	
Cr Profit on revaluation of investment (to remeasure investment in step acquisition)		7
Dr Share capital (70% \times 10)	7	
Dr Retained profit (70% \times 20)	14	
Dr Land (70% \times 20)	14	
Dr Goodwill	7	
Cr Investment in SUB (to eliminate investment in SUB)		42
Dr Share capital (30% \times 10)	3	
Dr Retained profit (30% \times 20)	6	
Dr Land (30% \times 20)	6	
Cr Non-controlling interest (to record non-controlling interest)		15

The consolidated balance sheet of PAR Ltd group as at 31 December 20x3 is as follows:

	\$'mil
Share capital	50
Retained profit (13 + 7)	20
	70
Non-controlling interest	<u>15</u>
	<u>85</u>
Goodwill	7
Land	30
Cash	<u>48</u>
	<u>85</u>

Note that this is a case where the parent is acquiring control of a subsidiary in step acquisition, and the NCI is measured based on FV of net identifiable assets of the subsidiary. In such a case, as previously mentioned, FRS 103 provides that the goodwill will be computed as the difference (whether positive or negative) between: (i) the sum of the parent's cost of acquisition and the acquisition-date FV of the parent's previously held equity interest, and (ii) the parent's total share of the acquisition date FV of the net identifiable assets of the subsidiary, as follows:

Cost of the 50%	\$30,000,000
Acquisition-date fair value of previously held 20%	<u>\$12,000,000</u>
Total	\$42,000,000
Less 70% share of acquisition-date fair value of net identifiable assets of subsidiary (70% \times (\$30,000,000 + \$20,000,000))	<u>\$35,000,000</u>
Goodwill	<u>\$7,000,000</u>

This may also be computed as the total cost of \$35 million (\$5 million + \$30 million) plus the acquisition-date FV adjustment of the previously held equity interest of \$7 million (\$12 million - \$5 million).

¶103-620 Business combination achieved by contract

In a business combination achieved by contract alone, FRS 103 provides that the acquirer should attribute to the owners of the acquiree the amount of the acquiree's net assets as NCI (para 44).

It is possible, in this case, that all the equity interests in the acquiree are attributable to the NCI.

¶103-640 Reverse acquisition

A reverse acquisition is an acquisition where the entity that issues securities (the legal acquirer) is identified as the acquiree for accounting purposes, and the entity whose equity interests are acquired (the legal acquiree) is accounted for as the acquirer.

Reverse acquisition often occurs where a non-listed entity arranges to have itself "acquired" by a smaller listed entity as a means of obtaining listing in a stock exchange (often referred to as "back-door listing"). In such a reverse acquisition, even though legally the listed entity is regarded as the parent and the non-listed entity is regarded as the subsidiary, it may be noted that in substance, the private entity (legal subsidiary) is the acquirer and the listed entity (legal parent) is the acquiree.

Guidance on accounting for reverse acquisition is provided for in para B19 to B27 of Appendix B of FRS 103.

FRS 103 provides that the consolidated financial statements prepared following a reverse acquisition should be issued under the name of the legal parent, but described in the notes as a continuation of the financial statements of the legal subsidiary (para B19).

Specifically, FRS 103 requires the following (para B22):

- The issued share capital in the consolidated financial statements should be that of the legal parent company
- The reserves in the consolidated financial statements should be those of the legal subsidiary plus the legal subsidiary's interest in the post-acquisition reserve of the legal parent plus the difference arising from the reverse acquisition (see following)
- The assets and liabilities of the legal subsidiary should be recognised and measured in the consolidated financial statements at their pre-combination carrying amounts, and the assets and liabilities of the legal parents are to be recognised and measured based on their acquisition-date FV, and
- Comparative information presented in the consolidated financial statements should be that of the legal subsidiary.

One of the major issues in accounting for reverse acquisition is the determination of the cost of acquisition.

In a reverse acquisition, the cost of acquisition is deemed to have been incurred by the legal subsidiary in the form of equity instruments issued to the owners of the legal parent.

FRS 103 requires a calculation to be made to determine the number of equity instruments the legal subsidiary would have had to issue, in a normal acquisition, to give the owners of the legal parent the same percentage

ownership interest of the combined entity that results from the reverse acquisition. The FV of the number of equity instruments so calculated should be used as the cost of acquisition (para B20).

Illustration 18

ABC Ltd is listed in the Singapore Exchange (SGX) with 100 million shares in issue. The shareholders of XYZ Pte Ltd (which has 60 million shares in issue) wish to be listed through "back-door listing".

On 30 June 20x6, the two companies effect a takeover under which ABC issues 2.5 shares in exchange of each ordinary shares of XYZ, ie ABC issues 150 million of its shares in exchange for all the 60 million shares in XYZ.

In this case, while XYZ is legally a 100% owned subsidiary of ABC, the shareholders of XYZ have, in fact, gained a 60% control (150/250) over ABC. This is an example of reverse acquisition.

Assume that the balance sheets of the two companies immediately before the above-mentioned reverse acquisition as follows:

	ABC	XYZ
	\$'mil	\$'mil
Assets	180	370
Liabilities	<u>(70)</u>	<u>(170)</u>
	<u>110</u>	<u>200</u>
Share capital	100	60
Retained profit	<u>10</u>	<u>140</u>
	<u>110</u>	<u>200</u>

For the purposes of determining the cost of acquisition, it is necessary to determine the number of shares that XYZ would have to issue in an ordinary acquisition (and the FV of those shares). FRS 103 provides that the number of shares that XYZ would have to issue is equal to the number of shares that would provide the shareholders of ABC the same percentage ownership interest of the combined entity as they have in the reverse acquisition. In this case, given that after the reverse acquisition the other shareholders in ABC now have 40% interest in XYZ (through ABC), XYZ will have to issue 40 million of its shares (in an ordinary takeover) to give the same effect.

Assume that at 30 June 20x6, the FV of XYZ's shares is estimated at \$5.00 per share, the cost of takeover is deemed to be \$200 million (40 million × \$5).

Assume further that ABC's assets have a FV of \$190 million and the goodwill on consolidation is \$80 million (cost of acquisition of \$200 million — FV of net assets acquired of \$120 million (\$190 million — \$70 million)).

FRS 103 further provides that the consolidated financial statements should be prepared from the viewpoint of XYZ (the legal subsidiary), except that the share capital should be that of ABC (the legal parent).

- (ii) additional goodwill recognised during the reporting period, except goodwill included in a disposal group that, on acquisition, meets the criteria to be classified as held for sale in accordance with FRS 105 *Non-current Assets Held for Sale and Discontinued Operations*
 - (iii) adjustments resulting from the subsequent recognition of deferred tax assets during the reporting period in accordance with para 67
 - (iv) goodwill included in a disposal group classified as held for sale in accordance with FRS 105 and goodwill derecognised during the reporting period without having previously been included in a disposal group classified as held for sale
 - (v) impairment losses recognised during the reporting period in accordance with FRS 36. (FRS 36 requires disclosure of information about the recoverable amount and impairment of goodwill in addition to this requirement)
 - (vi) net exchange rate differences arising during the reporting period in accordance with FRS 21 *The Effects of Changes in Foreign Exchange Rates*
 - (vii) any other changes in the carrying amount during the reporting period
 - (viii) the gross amount and accumulated impairment losses at the end of the reporting period.
- (e) The amount and an explanation of any gain or loss recognised in the current reporting period that both:
- (i) relates to the identifiable assets acquired or liabilities assumed in a business combination that was effected in the current or previous reporting period, and
 - (ii) is of such a size, nature or incidence that disclosure is relevant to understanding the combined entity's financial statements.

¶103-800 Comparison with FRS 103 (2004)

There are several major differences between FRS 103 and FRS 103 (2004).

FRS 103 (2004) requires NCI (referred to as "minority interest") to be initially measured based on its proportionate share of the acquisition-date FV of the net identifiable assets of the subsidiary. FRS 103 allows NCI to be measured based on either: (i) its FV or (ii) its proportionate share of the acquisition-date FV of the net identifiable assets of the subsidiary.

Arising from the different measurement bases for NCI allowed under FRS 103, the amount of goodwill (negative goodwill) will be different depending on the measurement basis used for the NCI. Under FRS 103 (2004), goodwill is just the difference between the parent's cost of acquisition and the parent's proportionate share of the acquisition-date FV of the net identifiable assets of the subsidiary.

FRS 103 specifically requires all acquisition-related costs to be expensed when incurred. FRS 103 (2004) allowed costs that are directly attributable to acquisition to be capitalised as part of the acquisition cost.

FRS 103 contains more specific and detailed provisions on "step acquisition".

Business combinations involving only mutual entities and business combinations achieved by contract alone, which were outside the scope of FRS 103 (2004), are now within the scope of FRS 103.

¶103-850 Comparison with IASB standard

FRS 103 is based on IFRS 3 (2009) *Business Combinations* issued by the International Accounting Standards Board (IASB).

There are no major differences between FRS 103 and IFRS 3 (2009). Compliance with FRS 103 will ensure compliance with IFRS 3 (2009).

APPENDIX A

¶103-900 Appendix A

This appendix presents:

- an illustration on the purchase method of accounting for business combinations, and
- a discussion on "pooling of interest" (or "merger") method.

¶103-910 Purchase method of accounting for business combination

Illustration A1

On 30 June 20x8, A Ltd issues 100,000 of its shares to the shareholders of B Ltd in exchange for 90,000 of B Ltd's shares. (B Ltd's share capital consists of 100,000 shares. Assume B Ltd's revenue and expenses for 20x8 accrues evenly throughout the year). After the above-mentioned exchange, the shareholders of A Ltd and former shareholders of B Ltd now jointly own and share the risks and benefits of A Ltd, which in turn owns B Ltd.

At the date of the above-mentioned transaction, the market value of A Ltd's shares is \$2.00 per share, and B Ltd's net assets are stated at their respective FV, except for land which is deemed to be undervalued by \$10,000. Any other excess payment is deemed to be payment for advantage of affiliation, which is to be amortised over five years, commencing 20x9, on a straight line basis.

During December 20x8, B Ltd sells raw material of \$50,000 (invoiced at cost + 50%) to A Ltd. As at 31 December 20x8, A Ltd's stock includes \$30,000 of raw material purchased from B Ltd.

¶106-100 Introduction

FRS 106 *Exploration for and Evaluation of Mineral Resources* was issued on 18 August 2005 and became operative for annual periods beginning on or after 1 January 2006.

The objective of FRS 106 is to specify the financial reporting for the exploration for and evaluation of mineral resources. Specifically, FRS 106 applies only to exploration and evaluation expenditure that an entity incurs; it does not address the other aspects of accounting by entities engaged in the mining industry.

Some of the key terminologies used in FRS 106 are defined as follows:

- “Exploration for and evaluation of mineral resource” is defined as the search for mineral resources after the entity has obtained legal rights to explore in a specific area, as well as the determination of the technical feasibility and commercial viability of extracting the mineral resources.
- “Exploration and evaluation expenditure” is defined as expenditure incurred by an entity in connection with the exploration for and evaluation of mineral resources before the technical feasibility and commercial viability of extracting the mineral resources are demonstrable. Examples of exploration and evaluation expenditure include expenditure incurred in relation to acquisition, right to explore, topographical, geological, geochemical and geophysical studies, exploratory drilling, trenching and sampling, and evaluating the technical feasibility and commercial viability of extracting a mineral resource.
- “Exploration and evaluation assets” is defined as exploration and evaluation expenditure recognised as assets in accordance with the entity’s accounting policy.

FRS 106 is not very substantive in content (since it is just phase one of the International Accounting Standards Board (IASB) project on extractive industry). Thus, this chapter will just briefly discuss the major provisions of FRS 106.

¶106-200 Recognition

FRS 106 allows an entity to adopt any accounting policy for the recognition of exploration and evaluation assets, so long as the accounting policy will result in information that is relevant and reliable, consistent with the requirement of para 10 of FRS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* (para 6). In developing the accounting policy, FRS 106 does not require an entity to make reference to the requirement and guidance of a similar FRS and to the concepts in the Framework, or to the pronouncements of other accounting-setting bodies and other accounting literature, as would otherwise be required under para 11 and para 12 of FRS 8 (para 7).

¶106-300 Measurement

FRS 106 provides that exploration and evaluation assets, upon recognition, should be measured at cost (para 8). Subsequently, they may be accounted for using the cost model or the revaluation model, in accordance with FRS 16 *Property, Plant and Equipment* or FRS 38 *Intangible Assets*.

¶106-400 Impairment

FRS 106 requires exploration and evaluation assets to be assessed for impairment when facts and circumstances suggest that the carrying amount of the assets may exceed its recoverable amount.

Examples of facts and circumstances that indicate impairment are:

- the period for which the entity has the right to explore in a specific area has expired during the period or will expire in the near future
- exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the entity has decided to discontinue such activities in the specific area, and
- sufficient data exists to indicate that the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full.

FRS 106 also provides that an entity should determine an accounting policy for allocating exploration and evaluation assets to cash generating units or groups of cash generating units for the purpose of assessing impairment. However, each cash generating unit or groups of cash generating units to which an exploration and evaluation asset is allocated should not be larger than a segment determined in accordance with FRS 14 *Segment Reporting* (para 21).

FRS 106 further provides that any impairment loss should be accounted for in accordance with FRS 36 *Impairment of Assets*.

¶106-500 Presentation

Some exploration and evaluation assets are treated as tangible assets (eg vehicles and drilling rigs) whereas others as intangible assets (eg drilling rights). Sometimes, a tangible asset is used to develop an intangible asset. In such a case, the value of the tangible asset consumed is to be treated as part of the cost of the intangible asset.

FRS 106 requires the exploration and evaluation assets to be classified as tangible assets or intangible assets according to the nature of the assets (para 15).

FRS 106 further requires the exploration and evaluation assets to be presented as a separate class of assets (para 25).

¶107-100 Introduction

The International Accounting Standards Board (IASB) has issued four accounting standards on financial instruments:

- IAS 32 *Financial Instruments: Disclosure and Presentation*, issued in March 1995 and operative on 1 January 1996, deals with the disclosure and presentation issues relating to financial instruments (since 1 January 2007, IAS 32 no longer deals with disclosure issues, which are dealt with in IFRS 7)
- IAS 39 *Financial Instruments: Recognition and Measurement*, issued in January 1999 and operative on 1 January 2001, deals with the recognition and measurement issues relating to financial instruments
- IFRS 7 *Financial Instruments: Disclosures*, issued in August 2005 and operative on 1 January 2007, deals with disclosure issues relating to financial instruments (superseding the provisions of IAS 32 on disclosure issues), and
- IFRS 9 *Financial Instruments*, first issued in July 2014, will replace IAS 39 effective for annual periods beginning on or after 1 January 2018.

In Singapore, IAS 32 was issued by the CCDG as FRS 32 (2003) *Financial Instruments: Disclosure and Presentation* in January 2003 and was operative for financial statements covering periods beginning on or after 1 October 2000. IAS 39 was issued as FRS 39 (2003) *Financial Instruments: Recognition and Measurement* in May 2003 and was operative for financial statements covering periods beginning on or after 1 January 2005. IFRS 7 was issued as FRS 107 *Financial Instruments: Disclosures* in January 2006 to supersede those provisions of FRS 32 dealing with disclosure issues and is operative on 1 January 2007 for listed companies and on 1 January 2008 for non-listed companies. (The title of FRS 32 has been consequently renamed *Financial Instruments: Presentation*.) IFRS 9 was issued as FRS 109 *Financial Instruments* in December 2014 to supersede FRS 39 *Financial Instruments: Recognition and Measurement*, and was operative for financial statements covering periods beginning on or after 1 January 2018.

Thus, commencing from 1 January 2018, the three FRSs dealing with financial instruments are, namely:

- FRS 32 *Financial Instruments: Presentation*
- FRS 107 *Financial Instruments: Disclosures*; and
- FRS 109 *Financial Instruments*.

The objective of FRS 107 is to require entities to provide disclosures in their financial statements that enable users to evaluate the significance of financial instruments for the entity's financial position and performance; and the nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the reporting date, and how the entity manages those risks.

The effective date of FRS 107 is as follows:

- Companies incorporated or foreign companies registered under the *Companies Act* that have been admitted to the official list of a securities exchange in Singapore and have not been removed from that official list, should apply FRS 107 for annual periods beginning on or after 1 January 2007.
- All other entities incorporated or registered in Singapore should apply FRS 107 for annual periods beginning on or after 1 January 2008.

Earlier application is encouraged. If an entity applies this FRS for an earlier period, it should disclose that fact.

FRS 107 is applicable to all types of financial instruments, except:

- those interests in subsidiaries, associates and joint ventures that are accounted for in accordance with FRS 110 *Consolidated Financial Statements*, FRS 27 *Separate Financial Statements*, or FRS 28 *Investments in Associates and Joint Ventures*. However, in some cases, FRS 110, FRS 27 or FRS 28 permits an entity to account for an interest in a subsidiary, associate or joint venture using FRS 109. In those cases, entities should apply the requirements in FRS 107 and, for those measured at fair value, the requirements of FRS 113 *Fair Value Measurement*. Entities should also apply FRS 107 to all derivatives linked to interests in subsidiaries, associates or joint ventures unless the derivative meets the definition of an equity instrument in FRS 32
- employers' rights and obligations arising from employee benefit plans, to which FRS 19 *Employee Benefits* applies
- insurance contracts as defined in FRS 104 *Insurance Contracts*. However, FRS 107 applies to derivatives that are embedded in insurance contracts if FRS 109 requires the entity to account for them separately. Moreover, an issuer should apply FRS 107 to *financial guarantee contracts* if the issuer applies FRS 109 in recognising and measuring the contracts, but should apply FRS 104 if the issuer elects, in accordance with para 4(d) of FRS 104, to apply FRS 104 in recognising and measuring them
- financial instruments, contracts and obligations under share-based payment transactions to which FRS 102 *Share-based Payment* applies, except that FRS 107 applies to contracts within the scope of para 5 to para 7 of FRS 39; and
- instruments that are required to be classified as equity instruments in accordance with paragraphs 16A and 16B or paragraphs 16C and 16D of FRS 32.

The disclosures required under FRS 107 may be categorised into:

- accounting disclosures, and
- risk disclosures.

ACCOUNTING DISCLOSURES

¶107-200 Accounting disclosures

FRS 107 requires an entity to disclose such accounting information so as to enable users of its financial statements to evaluate the significance of financial instruments for its financial position and performance.

Such accounting information should be disclosed either in the statement of profit or loss and other comprehensive income, statement of financial position, statement of changes in equity or the notes to the financial statements.

¶107-210 Statement of financial position

FRS 107 requires the following information in relation to statement of financial position items to be disclosed (para 7).

Categories of financial assets and financial liabilities

The carrying amounts of each of the following categories, as defined in FRS 109, should be disclosed either on the face of the statement of financial position or in the notes (para 8):

- financial assets at fair value through profit or loss (FVTPL), showing separately:
 - those designated as such upon initial recognition or subsequently, and
 - those classified as held for trading in accordance with FRS 109.
- financial liabilities at FVTPL, showing separately:
 - those designated as such upon initial recognition or subsequently, and
 - those classified as held for trading in accordance with FRS 109.
- financial assets measured at amortised cost.
- financial liabilities measured at amortised cost.
- financial assets measured at fair value through other comprehensive income (FVTOCI), showing separately:
 - those measured at FVTOCI, and
 - those investments in equity instruments designated as such in accordance with FRS 109.

Financial assets or financial liabilities at fair value through profit or loss

If the entity has designated a financial asset (or a group of financial assets) that would otherwise be FVTOCI or amortised cost as measured at FVTPL, FRS 107 requires it to disclose (para 9):

- the maximum exposure to credit risk of the financial asset (or group of financial assets) at the reporting date.
- the amount by which any related credit derivatives or similar instruments mitigate that maximum exposure to credit risk.
- the amount of change, during the period and cumulatively, in the fair value (FV) of the financial asset (or group of financial assets) that is attributable to changes in the credit risk of the financial asset determined either:
 - as the amount of change in its FV that is not attributable to changes in market conditions that give rise to market risk, or
 - using an alternative method the entity believes more faithfully represents the amount of change in its FV that is attributable to changes in the credit risk of the asset.
- the amount of the change in the FV of any related credit derivatives or similar instruments that has occurred during the period and cumulatively since the financial asset was designated.

If an entity has designated a financial liability as at FVTPL, and is required to present the effects of changes in that liability's credit risk in other comprehensive income (OCI), FRS 107 para 10 requires it to disclose:

- the amount of change, cumulatively, in the FV of the financial liability that is attributable to changes in the credit risk of that liability.
- the difference between the financial liability's carrying amount and the amount the entity would be contractually required to pay at maturity to the holder of the obligation.
- any transfers of the cumulative gain or loss within equity during the period including the reason for such transfers.
- if a liability is derecognised during the period, the amount (if any) presented in OCI that was realised at derecognition.

If an entity has designated a financial liability as at FVTPL, and is required to present all changes in the fair value of that liability in profit or loss, FRS 107 para 10A requires it to disclose:

- the amount of change, during that period and cumulatively, in the FV of the financial liability that is attributable to changes in the credit risk of that liability.
- the difference between the financial liability's carrying amount and the amount the entity would be contractually required to pay at maturity to the holder of the obligation.

Additionally, FRS 107 requires the entity to disclose:

- the methods used to determine the FV attributable to changes in credit risk

- if the entity believes that the disclosure it has given to comply with the above-mentioned requirements does not faithfully represent the change in the FV of the financial asset or financial liability attributable to changes in its credit risk, the reasons for reaching this conclusion and the factors it believes are relevant, and
- a detailed description of the methodology or methodologies used to determine whether presenting the effects of changes in a liability's credit risk in OCI would create or enlarge an accounting mismatch in profit or loss. If an entity is required to present the effects of changes in a liability's credit risk in profit or loss, the disclosure must include a detailed description of the economic relationship as described in FRS 109.

Investments in equity instruments designated at fair value through other comprehensive income

If the entity has designated investments in equity instruments to be measured at FVTOCI, FRS 107 requires it to disclose (para 11A):

- which investments in equity instruments have been designated to be measured at FVTOCI.
- the reasons for using this presentation alternative.
- the fair value of each such investment at the end of the reporting period.
- dividends recognised during the period, showing separately those related to investments derecognised during the reporting period and those related to investments held at the end of the reporting period.
- any transfers of the cumulative gain or loss within equity during the period including the reason for such transfers.

Under FRS 107 para 11B, where an entity derecognised such investments, it shall disclose (a) the reasons for disposal, (b) fair value at the date of derecognition, and (c) the cumulative gain or loss on disposal.

Reclassification

If the entity has reclassified a financial asset, FRS 107 requires it to disclose the date of reclassification, a detailed explanation of the change in business model and a qualitative description of its effect on the entity's financial statements, and the amount reclassified into and out of each category (para 12B).

Offsetting financial assets and financial liabilities

There are also disclosure requirements stated in FRS 107 paragraphs 13B–13E for those recognised financial instruments that are set off in accordance to FRS 32, as

well as those recognised financial instruments that are subject to an enforceable master netting arrangement or similar agreement (para 13A).

In March 2012, the Accounting Standards Council (ASC) issued Amendments to FRS 107 *Disclosures — Offsetting Financial Assets and Financial Liabilities*. The Amendment is effective for annual periods beginning on or after 1 January 2013 and interim periods within those annual periods and complied with retrospectively.

This Amendment requires disclosure of information about rights of set-off associated with the entity's recognised financial assets and liabilities to enable understanding of the actual and potential effects of netting arrangements on the entity's financial position (para 13B).

In particular, the following quantitative information is required to be disclosed separately under FRS 107 para 13C for recognised financial assets and liabilities:

- the gross amounts of those recognised financial assets and liabilities;
- the amounts set off in accordance with FRS 32;
- the net amounts presented in the statement of financial position;
- the amounts subject to an enforceable master netting arrangement or similar agreement that are not included in (b), including:
 - amounts related to recognised financial instruments that do not meet some or all of the offsetting criteria in FRS 32, and
 - amounts related to financial collaterals (including cash collaterals);
- The net amount after deducting the amount in (d) from the amount in (c).

Illustration 1 (Modified from the example in FRS 107)

ABC Ltd has a derivative asset (fair value of \$100 million) and a derivative liability (fair value of \$80 million) with LMN Ltd that meet the offsetting criteria of FRS 32.42.

ABC Ltd also has a derivative asset (fair value of \$40 million) and a derivative liability (fair value of \$30 million) with XYZ Ltd that do not meet the offsetting criteria of FRS 32.42 (because they can be set off only in the event of default).

In this case, the disclosure required by FRS 107 (para 13C) is as follows (all figures in \$'mil):

Financial assets

Counter-party	(a)	(b)	(c)	(d)	(e)
LMN	100	(80)	20	—	20
XYZ	40	—	40	(30)	10
	140	(80)	60	(30)	30