

CHAPTER 23

Accounting for associates and joint ventures

23.1 Introduction

The previous three chapters have focused on the need for consolidated financial statements where an investor has control over an entity. In these circumstances line by line consolidation is appropriate. Where the size of an investment is not sufficient to give sole control, but where the investment gives the investor significant influence or joint control, then a modified form of accounting is appropriate. We will consider this issue further in this chapter.

Objectives

By the end of this chapter, you should be able to:

- define an associate;
- incorporate an associate into the consolidated financial statements using the equity method;
- account for transactions between a group and its associate;
- define a joint venture and describe the three types of joint venture into which a company might enter;
- prepare financial statements incorporating interests in joint ventures.

23.2 Definitions of associates and of significant influence

An associate is an entity over which the investor has significant influence and which is neither a subsidiary nor a joint venture of the investor.¹

Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control over these policies.²

Significant influence will be assumed in situations where one company has 20% or more of the voting power in another company, unless it can be shown that there is no such influence. Unless it can be shown to the contrary, a holding of less than 20% will be assumed insufficient for associate status. The circumstances of each case must be considered.³

IAS 28 suggests that one or more of the following might be evidence of an associate:

- (a) representation on the board of directors or equivalent governing body of the investee;
- (b) participation in policy-making processes;

- (c) material transactions between the investor and the investee;
- (d) interchange of managerial personnel; or
- (e) provision of essential technical information.⁴

23.3 The treatment of associated companies in consolidated accounts

Associated companies will be shown in consolidated accounts under the equity method, unless the investment meets the criteria of a disposal group held for sale under IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*. If this is the case it will be accounted for under IFRS 5 at the lower of carrying value and fair value less costs to sell.

The equity method is a method of accounting whereby:

- The investment is reported in the consolidated statement of financial position in the non-current asset section.⁵ It is reported initially at cost adjusted, at the end of each financial year, for the post-acquisition change in the investor's share of the net assets of the investee.⁶
- In the consolidated statement of comprehensive income, income from associates is reported after profit from operations together with finance costs and finance expenses.⁷ The income reflects the investor's share of the post-tax results of operations of the investee.⁸

23.4 The Brill Group – the equity method illustrated

Brill plc had acquired 80% of Bream plc's ordinary shares in 20X0.

At date of acquisition of shares in associate on 1 January 20X0:

- Brill acquired 20% of the ordinary shares in Cod for £20,000, i.e. Brill was assumed to have significant influence.
- The retained earnings of Cod were £22,500 and the general reserve was £6,000.

Set out below are the consolidated accounts of Brill and its subsidiary Bream and the individual accounts of the associated company, Cod, together with the consolidated group accounts.

23.4.1 Consolidated statement of financial position

Statements of financial position of the Brill Group (parent plus subsidiaries already consolidated) and Cod (an associate company) as at 31 December 20X2:

	<i>Brill and Subsidiaries</i>	<i>Cod</i>	<i>Group</i>	
	£	£	£	
<i>Non-current assets</i>				
Property, plant and equipment	172,500	59,250	172,500	
Goodwill on consolidation	13,400		13,400	
Investment in Cod	20,000		23,600	Note 1
<i>Current assets</i>				
Inventories	132,440	27,000	132,440	
Trade receivables	151,050	27,000	151,050	
Current account – Cod	2,250		2,250	Note 2
Bank	36,200	4,500	36,200	
	<u>527,840</u>	<u>117,750</u>	<u>531,440</u>	

	<i>Brill and Subsidiaries</i>	<i>Cod</i>	<i>Group</i>	
	£	£	£	
<i>Current liabilities</i>				
Trade payables	110,250	25,500	110,250	
Taxation	27,750	6,000	27,750	
Current account – Brill		<u>2,250</u>		
	<u>138,000</u>	<u>33,750</u>	<u>138,000</u>	
Total net assets	<u><u>389,840</u></u>	<u><u>84,000</u></u>	<u><u>393,440</u></u>	
EQUITY				
£1 ordinary shares	187,500	37,500	187,500	
General reserve	24,900	9,000	25,500	Note 3
Retained earnings	<u>145,940</u>	<u>37,500</u>	<u>148,940</u>	Note 4
	358,340	84,000	361,940	
Non-controlling interest	<u>31,500</u>	<u>—</u>	<u>31,500</u>	Note 5
	<u><u>389,840</u></u>	<u><u>84,000</u></u>	<u><u>393,440</u></u>	

Notes:

1 Investment in associate	£	£
Initial cost of the 20% holding		20,000
Share of post-acquisition reserves of Cod:		
20% (37,500 – 22,500) (retained earnings) =	3,000	
20% (9,000 – 6,000) (general reserves) =	<u>600</u>	<u>3,600</u>
		<u><u>23,600</u></u>

Note that unlike subsidiaries the assets and liabilities are not joined line by line with those of the companies in the group.

Where necessary the investment in the associate is tested for impairment under IAS 28.⁹

- 2 The Cod current account is received from outside the group and must therefore continue to be shown as receivable by the group. **It is not cancelled.**

3 General reserve consists of:	£
Parent's general reserve	24,900
General reserve of Cod:	
The group share of the post-acquisition retained profits i.e. 20% (9,000 – 6,000) =	<u>600</u>
Consolidated general reserve	<u><u>25,500</u></u>

4 Retained earnings consists of:	
Parent's retained earnings	145,940
Retained earnings of Cod:	
The group share of the post-acquisition retained profits, i.e. 20% (37,500 – 22,500) =	<u>3,000</u>
Consolidated retained earnings	<u><u>148,940</u></u>

5 Non-controlling interest

Note that there is no non-controlling interest in Cod. Only the group share of Cod's net assets has been brought into the total net assets above (see note 1).

23.4.2 Consolidated statement of comprehensive income

Statements of comprehensive income for the year ended 31 December 20X2

	<i>Brill and Subsidiaries</i>	<i>Cod</i>	<i>Group</i>	
	£	£	£	
Sales	329,000	75,000	329,000	
Cost of sales	<u>114,060</u>	<u>30,000</u>	<u>114,060</u>	
Gross profit	214,940	45,000	214,940	
Expenses	<u>107,700</u>	<u>22,500</u>	<u>107,700</u>	
Profit from operations	107,240	22,500	107,240	
Dividends received	1,200	—	NIL	Note 1
Share of associate's profit	—	—	<u>3,300</u>	Note 2
Profit before tax	108,440	22,500	110,540	
Income tax expense	<u>27,750</u>	<u>6,000</u>	<u>27,750</u>	
Profit for the period	<u>80,690</u>	<u>16,500</u>	<u>82,790</u>	

Notes:

Profit before tax

- 1 Dividend received from Cod** is not shown because the share of Cod's profits (before dividend) has been included in the group account (see note 2). To include the dividend as well would be double counting.
- 2 Share of Cod's profit after tax** = $20\% \times \pounds 16,500 =$ £3,300
- 3** As in the statement of financial position, there is no need to account for a non-controlling interest in Cod. This is because the consolidated statement of comprehensive income only ever included the group share of Cod's profits.
- 4** There are no additional complications in the statement of changes in equity. The group retained earnings column will include the group share of Cod's post-acquisition retained earnings. There will be no additional column for a non-controlling interest in Cod.

23.5 The treatment of provisions for unrealised profits

It is never appropriate in the case of associated companies to remove 100% of any unrealised profit on inter-company transactions because only the group's share of the associate's profit and net assets are shown in the group accounts. This is illustrated in the Zenith example:

EXAMPLE ● Zenith Group made sales to an associate, Nadir plc, at a mark-up of £10,000. All the goods are in the inventory of Nadir at the year-end. Zenith's holding in Nadir was 20%. The Zenith Group will provide for 20% of £10,000 (i.e. £2,000) against the group share of the associate's profit in the statement of comprehensive income and against the group share of the associate's net assets in the statement of financial position.

23.6 The acquisition of an associate part-way through the year

In order to match the cost (the investment) with the benefit (share of the associate's net assets), the associate's profit will only be taken into account from the date of acquiring the holding in the associate. The associate's profit at the date of acquisition represents part of

the net assets that are being acquired at that date. The Puff example below is an illustration of the accounting treatment.

In this chapter the adjustment for unrealised profit is made against the group's share of the associate's profit and net assets irrespective of whether the associate is receiving goods from the group (i.e. downstream transactions) or providing goods to the group (i.e. upstream transactions).¹⁰

23.6.1 The Puff Group

At date of acquisition on 31 March 20X0 of shares in associate:

- Puff plc acquired 30% of the shares in Blow plc.
- At that date the accumulated retained earnings of Blow was £61,500.

During the year:

- On 1/10/20X0 Blow sold Puff goods for £15,000 which was cost plus 25%.
- All income and expenditure for the year in Blow's statement of comprehensive income accrued evenly throughout the year.

At end of financial year on 31 December 20X0:

- 75% of the goods sold to Puff by Blow were still in inventory.

Set out below are the consolidated statement of comprehensive income of Puff and its subsidiaries and the individual statement of comprehensive income of an associated company, Blow, together with the consolidated group statement of comprehensive income.

	<i>Puff and Subsidiaries</i>	<i>Blow</i>	<i>Group accounts</i>	
	£	£	£	
Revenue	225,000	112,500	225,000	Note 1
Cost of sales	75,000	56,250	75,000	Note 2
Gross profit	150,000	56,250	150,000	
Expenses	89,850	30,000	89,850	
	60,150	26,250	60,150	
Dividends received from associate	1,350	NIL	NIL	Note 3
Share of associate's profit	—	—	3,713	Note 4
Profit before taxation	61,500	26,250	63,863	
Income tax period	15,000	6,750	15,000	
Profit for the period	<u>46,500</u>	<u>19,500</u>	<u>48,863</u>	

Notes:

- 1 The revenue, cost of sales and all other income and expenses of the associated company are not added on a line by line basis with the those of the parent company and its subsidiaries. The group's share of the profit before taxation of the associate is shown as one figure (see note 4) and added to the remainder of the group's profit before taxation.
- 2 The group accounts 'cost of sales' figure does not include the provision for unrealised profit, as this has been deducted from the share of the associate's profit.
- 3 The dividend received of £1,350 is eliminated, being replaced by the group share of its underlying profits.

4 Share of profits after tax of the associate

	£
Profit after tax	19,500
Apportion for 9 months ($\frac{9}{12} \times 19,500$)	14,625
Less: unrealised profit ($\frac{25}{125} \times 15,000$) $\times 75\%$	2,250
	<u>12,375</u>
Group share ($30\% \times 12,375$)	3,713

- 5 There is no share of the associated company's retained earnings brought forward because the shares in the associate were purchased during the year.

23.7 Joint ventures

IAS 31 *Interests in Joint Ventures* defines a joint venture as one in which there is a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control so that no single venturer is in a position to control the activity unilaterally.¹¹

There are a number of ways¹² in which a contractual arrangement may be evidenced, e.g. by a formal contract between the venturers or minutes of discussions between the venturers setting out in writing matters such as:

- (a) scope – identifying the activity and its duration;
- (b) management – the appointment of managers/directors;
- (c) finance – capital contributions and sharing of profits and losses;
- (d) stewardship – reporting obligations.

The standard identifies three broad types, namely, **jointly controlled operations**, **jointly controlled assets** and **jointly controlled entities**.

23.7.1 Jointly controlled operations

The collaborative approach to the manufacture of an aircraft is a good example of this type of joint venture where the wings, body and engine are built by different companies. Each company bears its own costs and takes an agreed contractual share of the revenue from the sale of the aircraft. Each company is responsible for raising its own capital, using its own production capacity and working capital and incurring its own expenses.

Financial reports

The following are reported in the financial statements of each venturer:

- (a) the assets that it controls and the liabilities that it incurs; and
- (b) the expenses that it incurs and its share of the income that it earns from the sale of goods or services by the joint venture.

23.7.2 Jointly controlled assets

This type of joint venture is one in which the venturers have joint control over the assets contributed to or acquired for the purposes of the joint venture. They do not involve the establishment of a corporation, partnership or other entity. This includes situations where the participants derive benefit from the joint activity through a share of production, rather than by receiving a share of the results of trading.

The common use of an oil pipeline by companies which control and finance it and pay according to the amount of throughput is an example¹³ from IAS 31.

Financial reports

The following are reported in the financial statements of each venturer:

- (a) its share of the jointly controlled assets, classified according to the nature of the assets;
- (b) any liabilities that it has incurred;
- (c) its share of any liabilities incurred jointly with the other venturers in relation to the joint venture;
- (d) any income from the sale or use of its share of the output of the joint venture, together with its share of any expenses incurred by the joint venture; and
- (e) any expenses that it has incurred in respect of its interest in the joint venture.

The following is an extract from the 2005 Rio Tinto annual report:

The Group's proportionate interest in the assets, liabilities, revenues, expenses and cash flows of jointly controlled asset ventures are incorporated into the Group's financial statements under the appropriate headings. In some situations, joint control exists even though the Group has an ownership interest of more than 50 per cent because of the veto rights held by joint venture partners.

23.7.3 Jointly controlled entities

These joint ventures are operated through a corporation or partnership which controls the assets of the joint venture, incurs liabilities and expenses and earns income and enters into contracts in its own name.

Jointly controlled entities are accounted for in group accounts using either the equity accounting method or proportionate consolidation.

Financial reports

A jointly controlled entity maintains its own accounting records¹⁴ and prepares and presents financial statements in the same way as other entities in conformity with International Financial Reporting Standards.

23.7.4 Proportionate consolidation¹⁵

Proportionate consolidation is a method of accounting whereby a venturer's share of each of the assets, liabilities, income and expenses of a jointly controlled entity is combined line by line with similar items in the venturer's financial statements or reported as separate line items in the venturer's financial statements.

There is a criticism of proportionate consolidation that there is a conceptual problem with the investor reporting in its statement of financial position assets that it does not control. The alternative is to apply equity accounting but this would mean that equity accounting would be applied to two different types of investments, namely, associates in which the investor only has a significant influence and joint ventures in which it has joint control.

The IASB has issued an exposure draft of a proposed amendment to IAS 31 that suggests the withdrawal of proportionate consolidation for joint ventures. This would indeed mean that jointly controlled entities would be accounted for using the equity method in the same way as associates.

23.7.5 Equity accounting method

In the UK joint ventures are generally required to be accounted for using the equity method. IAS 31 takes a different approach in that it permits equity accounting but actively argues against it,¹⁶ saying:

Some venturers report their interests in jointly controlled entities using the equity method, as described in IAS 28. The use of the equity method is supported by those who argue that it is inappropriate to combine controlled items with jointly controlled items and by those who believe that venturers have significant influence, rather than joint control, in a jointly controlled entity. This Standard does not recommend the use of the equity method because proportional consolidation better reflects the substance and economic reality of a venturer's interest in a jointly controlled entity, that is control over the venturer's share of the future economic benefits. Nevertheless, this Standard permits the use of the equity method, as an allowed alternative treatment, when reporting interests in jointly controlled entities.

Summary

Associates are accounted for using the equity method whereby there is a single-line entry in the statement of financial position for the Investment in Associate, which is carried initially at cost and the balance adjusted annually for the investor's share of the associate's current year's profit or loss.

Joint ventures take a number of forms and, in each case, users need to be able to identify the assets and liabilities committed to the venture and the results in so far as they relate to the venturer. For joint venture entities, IAS 31 permits alternative treatments with investors able to adopt the equity accounting method or proportionate consolidation. The IASB no longer supports the proportionate consolidation method.

REVIEW QUESTIONS

- I The following is an extract from the notes to the 1999 consolidated financial statements of the Chugoku Electric Power Company, Incorporated.

Equity method

Investments in four (three in 1998) affiliated companies (20% to 50% owned) are accounted for by the equity method and, accordingly, are stated at cost adjusted for equity in undistributed earnings and losses from the date of acquisition.

- What is another name for most companies which are 20% to 50% owned?
- What is meant by the word 'equity' in the above statement?
- What are the entries in the statement of comprehensive income under the equity method of accounting?
- What are the differences between the equity method and consolidation?

- 2 Why are associated companies accounted for under the equity method rather than consolidated?
- 3 How does the treatment of inter-company unrealised profit differ between subsidiaries and associated companies?
- 4 IAS 28, para. 17, states:

The recognition of income on the basis of distributions received may not be an adequate measure of the income earned by an investor on an investment in an associate.

Explain why this may be so.

- 5 Where an associate has made losses, IAS 28, para. 30, states:

After the investor's interest is reduced to zero, additional losses are provided for, and a liability is recognised, only to the extent that the investor has incurred legal or constructive obligations or made payments on behalf of the associate. If the associate subsequently reports profits, the investor resumes recognising its share of those profits only after its share of the profits equals the share of losses not recognised.

Explain why profits are recognised only after its share of the profits equals the share of losses not recognised.

- 6 The result of including goodwill by valuing the non-controlling shares at their market price using Method 2 is to value the non-controlling shares on a different basis to valuing an equity investment in an associate. Discuss whether there should be a uniform approach to both.

EXERCISES

An extract from the solution is provided on the Companion Website (www.pearsoned.co.uk/elliott-elliott) for exercises marked with an asterisk (*).

* Question 1

The following are the financial statements of the parent company Swish plc, a subsidiary company Broom and an associate company Handle.

Statements of financial position as at 31 December 20X3

	Swish £	Broom £	Handle £
ASSETS			
<i>Non-current assets</i>			
Property, plant and equipment at cost	320,000	180,000	100,000
Depreciation	<u>200,000</u>	<u>70,000</u>	<u>21,000</u>
	<u>120,000</u>	<u>110,000</u>	<u>79,000</u>
Investment in Broom	140,000		
Investment in Handle	40,000		
<i>Current assets</i>			
Inventories	120,000	60,000	36,000
Trade receivables	130,000	70,000	36,000
Current account – Broom	15,000		
Current account – Handle	3,000		
Bank	<u>24,000</u>	<u>7,000</u>	<u>6,000</u>
Total current assets	<u>292,000</u>	<u>137,000</u>	<u>78,000</u>
Total assets	<u>592,000</u>	<u>247,000</u>	<u>157,000</u>
EQUITY AND LIABILITIES			
£1 ordinary shares	250,000	60,000	50,000
General reserve	30,000	20,000	12,000
Retained earnings	<u>150,000</u>	<u>120,000</u>	<u>50,000</u>
	430,000	200,000	112,000
<i>Current liabilities</i>			
Trade payables	132,000	25,000	34,000
Taxation payable	30,000	7,000	8,000
Current account – Swish		<u>15,000</u>	<u>3,000</u>
Total equity and liabilities	<u>592,000</u>	<u>247,000</u>	<u>157,000</u>

Statement of comprehensive income for the year ended 31 December 20X3

	£	£	£
Sales	300,000	160,000	100,000
Cost of sales	<u>90,000</u>	<u>80,000</u>	<u>40,000</u>
Gross profit	210,000	80,000	60,000
Expenses	95,000	50,000	40,000
Dividends paid (shown in equity)	<u>40,000</u>	<u>10,000</u>	<u>8,000</u>
Dividends received from Broom and Handle	<u>11,000</u>	<u>NIL</u>	<u>10,000</u>
Profit before tax	126,000	30,000	30,000
Income tax expense	<u>30,000</u>	<u>7,000</u>	<u>8,000</u>
Profit for the period	<u>96,000</u>	<u>23,000</u>	<u>22,000</u>
Dividend paid (shown in equity)	<u>40,000</u>	<u>10,000</u>	<u>8,000</u>

Swish acquired 90% of the shares in Broom on 1 January 20X1 when the balance on the retained earnings of Broom was £60,000 and the balance on the general reserve of Broom was £16,000. Swish also acquired 25% of the shares in Handle on 1 January 20X2 when the balance on Handle's accumulated retained profits was £30,000 and the general reserve £8,000.

During the year Swish sold Broom goods for £16,000, which included a mark-up of one-third. 80% of these goods were still in inventory at the end of the year.

Non-controlling interests are measured using method I.

Required:

- Prepare a consolidated statement of comprehensive income, including the associated company Handle's results, for the year ended 31 December 20X3.
- Prepare a consolidated statement of financial position as at 31 December 20X3. The group policy is to measure non-controlling interests using method I.

Question 2

Set out below are the financial statements of Ant Co., its subsidiary Bug Co. and an associated company Nit Co. for the accounting year-end 31 December 20X9.

Statements of financial position as at 31 December 20X9

	Ant \$	Bug \$	Nit \$
ASSETS			
<i>Non-current assets</i>			
Property, plant and equipment at cost	240,000	135,000	75,000
Depreciation	<u>150,000</u>	<u>52,500</u>	<u>15,750</u>
	90,000	82,500	59,250
Investment in Bug	90,000		
Investment in Nit	30,000		
<i>Current assets</i>			
Inventories	105,000	45,000	27,000
Trade receivables	98,250	52,500	27,000
Current account – Bug	11,250		
Current account – Nit	2,250		
Bank	<u>17,250</u>	<u>5,250</u>	<u>4,500</u>
Total current assets	<u>234,000</u>	<u>102,750</u>	<u>58,500</u>
Total assets	<u>444,000</u>	<u>185,250</u>	<u>117,750</u>
EQUITY AND LIABILITIES			
\$1 ordinary shares	187,500	45,000	37,500
General reserve	22,500	15,000	9,000
Retained earnings	<u>112,500</u>	<u>90,000</u>	<u>37,500</u>
	322,500	150,000	84,000
<i>Current liabilities</i>			
Trade payables	99,000	18,750	25,500
Taxation payable	22,500	5,250	6,000
Current account – Ant		<u>11,250</u>	<u>2,250</u>
Total equity and liabilities	<u>444,000</u>	<u>185,250</u>	<u>117,750</u>

Statements of comprehensive income for the year ended 31 December 20X9

	\$	\$	\$
Sales	225,000	120,000	75,000
Cost of sales	<u>67,500</u>	<u>60,000</u>	<u>30,000</u>
Gross profit	157,500	60,000	45,000
Expenses	70,500	37,500	30,000
Dividends received	<u>7,500</u>	<u>NIL</u>	<u>7,500</u>
Profit before tax	94,500	22,500	22,500
Taxation	<u>22,500</u>	<u>5,250</u>	<u>6,000</u>
Profit for the year	<u>72,000</u>	<u>17,250</u>	<u>16,500</u>
Dividends paid in year	<u>30,000</u>	<u>7,500</u>	<u>6,000</u>

Ant Co. acquired 80% of the shares in Bug Co. on 1 January 20X7 when the balance on the retained earnings of Bug Co. was \$45,000 and the balance on the general reserve of Bug Co. was \$12,000. The fair value of the non-controlling interest in Bug on 1 January 20X7 was £21,000. Group policy is to measure non-controlling interests using method 2. Ant Co. also acquired 25% of the shares in Nit Co. on 1 January 20X8 when the balance on Nit's retained earnings was \$22,500 and the general reserve \$6,000.

During the year Ant Co. sold Bug Co. goods for \$12,000, which included a mark-up of one-third. 90% of these goods were still in inventory at the end of the year.

Required:

- (a) Prepare a consolidated statement of comprehensive income for the year ending 31/12/20X9, including the associated company Nit's results.
- (b) Prepare a consolidated statement of financial position at 31/12/20X9, including the associated company.

Question 3

Alpha has owned 75% of the equity shares of Beta since the incorporation of Beta. Therefore, Alpha has prepared consolidated financial statements for some years. On 1 July 20X6 Alpha purchased 40% of the equity shares of Gamma. The statements of comprehensive income and summarised statements of changes in equity of the three entities for the year ended 30 September 20X6 are given below:

Statements of comprehensive income

	<i>Alpha</i> \$'000	<i>Beta</i> \$'000	<i>Gamma</i> \$'000
Revenue (Note 1)	150,000	100,000	96,000
Cost of sales	<u>(110,000)</u>	<u>(78,000)</u>	<u>(66,000)</u>
Gross profit	40,000	22,000	30,000
Distribution costs	(7,000)	(6,000)	(6,000)
Administrative expenses	<u>(8,000)</u>	<u>(7,000)</u>	<u>(7,200)</u>
Profit from operations	25,000	9,000	16,800
Investment income (Note 2)	6,450	Nil	Nil
Finance cost	<u>(5,000)</u>	<u>(3,000)</u>	<u>(4,200)</u>
Profit before tax	<u>26,450</u>	<u>6,000</u>	<u>12,600</u>
Income tax expense	<u>(7,000)</u>	<u>(1,800)</u>	<u>(3,600)</u>
Net profit for the period	<u>19,450</u>	<u>4,200</u>	<u>9,000</u>
<i>Summarised statements of changes in equity</i>			
Balance at 1 October 20X5	<u>122,000</u>	<u>91,000</u>	<u>82,000</u>
Net profit for the period	<u>19,450</u>	<u>4,200</u>	<u>9,000</u>
Dividends paid on 31 July 20X6	<u>(6,500)</u>	<u>(3,000)</u>	<u>(5,000)</u>
Balance at 30 September 20X6	<u>134,950</u>	<u>92,200</u>	<u>86,000</u>

Notes to the financial statements**Note 1 – Inter-company sales**

Alpha sells products to Beta and Gamma, making a profit of 25% on the cost of the products sold. All the sales to Gamma took place in the post-acquisition period. Details of the purchases of the products by Beta and Gamma, together with the amounts included in opening and closing inventories in respect of the products, are given below:

	<i>Purchased in</i> <i>year</i> \$'000	<i>Included in</i> <i>opening inventory</i> \$'000	<i>Included in closing</i> <i>inventory</i> \$'000
Beta	20,000	2,000	3,000
Gamma	10,000	Nil	1,500

There were no other inter-company sales between Alpha, Beta or Gamma during the period.

Note 2 – Investment income

Alpha's investment income includes dividends received from Beta and Gamma and interest receivable from Beta. The dividend received from Gamma has been credited to the statement of comprehensive income of Alpha without time apportionment. The interest receivable is in respect of a loan of \$20 million to Beta at a fixed rate of interest of 6% per annum. The loan has been outstanding for the whole of the year ended 30 September 20X6.

Note 3 – Details of acquisitions by Alpha

<i>Entity</i>	<i>Date of acquisition</i>	<i>Fair value adjustment at date of acquisition \$'000</i>
Beta	1 July 20X5	Nil
Gamma	1 June 20X6	6,400

There has been no impairment of the goodwill arising on the acquisition of Beta or of the investment in Gamma since the dates of acquisition of either entity.

The fair value adjustment has the effect of increasing the fair value of property, plant and equipment above the carrying value in the individual financial statements of Gamma. Group policy is to depreciate property, plant and equipment on a monthly basis over its estimated useful economic life. The estimated life of the property, plant and equipment of Gamma that was subject to the fair value adjustment is five years, with depreciation charged against cost of sales.

Note 4 – other information

- The purchase of shares in Gamma entitled Alpha to appoint a representative to the board of directors of Gamma. This meant that Alpha was potentially able to participate in, and significantly influence, the policy decisions of Gamma.
- No other investor is able to control the operating and financial policies of Gamma, but on one occasion since 1 July 20X6 Gamma made a policy decision with which Alpha did not fully agree.
- Alpha has not entered into a contractual relationship with any other investor to exercise joint control over the operating and financial policies of Gamma.
- All equity shares in Beta carry one vote at general meetings.
- The policy of Alpha regarding the treatment of equity investments in its consolidated financial statements is as follows:
 - Subsidiaries are fully consolidated.
 - Joint ventures are proportionally consolidated.
 - Associates are equity accounted.
 - Other investments are treated as available for sale financial assets.

Your assistant has been reading the working papers for the consolidated financial statements of Alpha for previous years. He has noticed that Beta has been consolidated as a subsidiary and has expressed the view that this must be because Alpha owns more than 50% of its shares. He has further stated that Gamma should be treated as an available-for-sale financial asset since Alpha is unable to control its operating and financial policies.

Required:

- (a) Prepare the consolidated statement of comprehensive income and consolidated statement of changes in equity of Alpha for the year ended 30 September 20X6. Notes to the consolidated statement of comprehensive income are not required. Ignore deferred tax.
- (b) Assess the observations of your assistant regarding the appropriate method of consolidating Beta and Gamma. Your assessment need NOT include an explanation of the detailed mechanics of consolidation. You should refer to the provisions of international financial reporting standards where you consider they will assist your explanation.

*** Question 4**

The following are the statements of comprehensive income of four companies for the year ended 31 October 2006, the end of their most recent financial year.

Income statements for the year ended 31 October 2006

	<i>Afjar</i>	<i>Jikki</i>	<i>Hupin</i>	<i>Sofrin</i>
	\$000	\$000	\$000	\$000
Revenue	8,890	4,580	4,470	2,760
Cost of sales	(3,000)	(2,200)	(1,800)	(1,700)
Gross profit	5,890	2,380	2,670	1,060
Distribution costs	(900)	(540)	(1,010)	(230)
Administrative expenses	(1,060)	(990)	(1,100)	(250)
Operating profit	3,930	850	560	580
Dividends receivable	410	130		
Interest receivable	230	321	150	
Interest payable	(1,188)	(455)	(380)	
Net profit before taxation	3,382	846	330	580
Income tax expense	(1,000)	(200)	(80)	(100)
Net profit after taxation	2,382	646	250	480
Earnings per share (in cents)	11.9	4.0	2.5	2.4

The following additional information is available:

- All shares issued by the companies have a face value of \$1.
- The companies made the following dividend payments to shareholders during the year ended 31 October 2006:

	<i>Afjar</i>	<i>Jikki</i>	<i>Hupin</i>	<i>Sofrin</i>
Preference dividend	\$000	\$000	\$000	\$000
– final for 2005, paid March 2006	400	120		
– interim for 2006, paid September 2006	400	120		
Ordinary dividend				
– final for 2005, paid March 2006	800	180	54	76
– interim for 2006, paid September 2006	800	180	54	76

Under IAS 32 *Financial Instruments: Disclosure and Presentation* dividends on preference shares have been included in interest payable.

- Afjar owns 60% of the ordinary shares in Jikki, 40% of the shares in Hupin and 25% of the shares in Sofrin. Jikki is a subsidiary of Afjar, Hupin is an associate of Afjar, and Sofrin is a joint venture.
- During the year ended 31 October 2006 Afjar sold inventory which had cost \$640,000 to Jikki at a mark up of 25%. Jikki had resold 65% of these items by 31 October 2006.
- On 1 July 2006 Jikki made a long term loan of \$500,000 to Afjar. The loan bears interest at 12% a year payable every six months in arrears.

Required:

Prepare, in so far as the information given permits, the consolidated statement of comprehensive income of Afjar for the year ended 31 October 2006. Your statement of comprehensive income should include a figure for earnings per share with a supportive disclosure note.

(The Association of International Accountants)

Question 5

The statements of comprehensive income for Continent plc, Island Ltd and River Ltd for the year ended 31 December 20X9 were as follows:

	<i>Continent plc</i>	<i>Island Ltd</i>	<i>River Ltd</i>
	€	€	€
Revenue	825,000	220,000	82,500
Cost of sales	<u>(616,000)</u>	<u>(55,000)</u>	<u>(8,250)</u>
Gross profit	209,000	165,000	74,250
Administration costs	(33,495)	(18,700)	(3,850)
Distribution costs	(11,000)	(14,300)	(2,750)
Dividends receivable from Island and River	<u>4,620</u>		
Profit before tax	169,125	132,000	67,650
Income tax	<u>(55,000)</u>	<u>(33,000)</u>	<u>(11,000)</u>
Profit after tax	<u>114,125</u>	<u>99,000</u>	<u>56,650</u>

Continent plc acquired 80% of Island Ltd for €27,500 on 1 January 20X3, when Island Ltd's retained earnings were €22,000 and share capital was €5,500. During the year, Island Ltd sold goods costing €2,750 to Continent plc for €3,850. At the year end, 10% of these goods were still in Continent plc's inventory.

Continent plc acquired 40% of River Ltd for €100,000 on 1 January 20X5, when River Ltd's share capital and reserves totalled €41,250 (share capital consisted of 11,000 50c shares). During the year River Ltd sold goods costing €1,650 to Continent plc for €2,200. At the year end, 50% of these goods were still in Continent plc's inventory.

Goodwill in Island Ltd had suffered impairment charges in previous years totalling €2,200 and Goodwill in River Ltd impairment charges totalling €7,700. Impairment has continued during 2009 reducing the Goodwill in Island by €550 and the Goodwill in River by €3,850.

Continent plc includes in its revenue management fees of €5,500 charged to Island Ltd and €2,750 charged to River Ltd. Both companies treat the charge as an administration cost.

Non-controlling interests are measured using method I.

Required:

Prepare Continent plc's consolidated statement of comprehensive income for the year ended 31 December 20X9.

Question 6

The statements of comprehensive income for Highway plc, Road Ltd and Lane Ltd for the year ended 31 December 20X9 were as follows:

	<i>Highway plc</i>	<i>Road Ltd</i>	<i>Lane Ltd</i>
	\$	\$	\$
Revenue	184,000	152,000	80,000
Cost of sales	<u>(48,000)</u>	<u>(24,000)</u>	<u>(16,000)</u>
Gross profit	136,000	128,000	64,000
Administration costs	(13,680)	(11,200)	(20,800)
Distribution costs	(11,200)	(17,600)	(8,000)
Dividends receivable from Road	<u>2,480</u>		
Profit before tax	113,600	99,200	35,200
Income tax	<u>(32,000)</u>	<u>(8,000)</u>	<u>(4,800)</u>
Profit for the period	<u>81,600</u>	<u>91,200</u>	<u>30,400</u>

Highway plc acquired 80% of Road Ltd for \$160,000 on 1.1.20X6 when Road Ltd's share capital was \$64,000 and reserves were \$16,000.

Highway plc acquired 30% of Lane Ltd for \$40,000 on 1.1.20X7 when Lane Ltd's share capital was \$8,000 and reserves were \$8,000.

Goodwill of Road Ltd had suffered impairment charges of \$14,400 in previous years and \$4,800 was to be charged in the current year. Goodwill of Lane Ltd had suffered impairment charges of \$3,520 in previous years and \$1,760 was to be charged in the current year.

During the year Road Ltd sold goods to Highway plc for \$8,000. These goods had cost Road Ltd \$1,600. 50% were still in Highway's inventory at the year end.

During the year Lane Ltd sold goods to Highway plc for \$6,400. These goods had cost Lane Ltd \$3,200. 50% were still in Highway's inventory at the year end.

Highway's revenue included management fees of 5% of Road and Lane's turnover. Both of those companies have treated the charge as an administration cost.

Non-controlling interests are measured using method 1.

Required:

Prepare Highway's consolidated statement of comprehensive income for the year ended 31.12.20X9.

Question 7

The following are the financial statements of the parent company Alpha plc, a subsidiary company Beta and an associate company Gamma.

Statements of financial position as at 31 December 20X9

	Alpha £	Beta £	Gamma £
ASSETS			
<i>Non-current assets</i>			
Land at cost	540,000	256,500	202,500
Investment in Beta	216,000		
Investment in Gamma	156,600		
<i>Current assets</i>			
Inventories	162,000	54,000	135,000
Trade receivables	108,000	72,900	91,800
Dividend receivable from Beta	12,420		
Current account – Beta	10,800		
Current account – Gamma	13,500		
Cash	237,600	62,100	67,500
Total current assets	<u>544,320</u>	<u>189,000</u>	<u>294,300</u>
Total assets	<u>1,456,920</u>	<u>445,500</u>	<u>496,800</u>
EQUITY AND LIABILITIES			
£1 shares	540,000	67,500	27,000
Retained earnings	769,500	329,400	391,500
	<u>1,309,500</u>	<u>396,900</u>	<u>418,500</u>
<i>Current liabilities</i>			
Trade payables	93,420	24,300	59,400
Dividends payable	54,000	13,500	5,400
Current account – Alpha	—	10,800	13,500
Total equity and liabilities	<u>1,456,920</u>	<u>445,500</u>	<u>496,800</u>

On 1 January 20X5 Alpha plc acquired 80% of Beta plc for £216,000 when Beta plc's share capital and reserves were £81,000, and 30% of Gamma Ltd for £156,600 when Gamma Ltd's share capital and reserves were £40,500. The fair value of the land at the date of acquisition was £337,500 in Beta plc and £270,000 in Gamma Ltd. Both companies have kept land at cost in their statement of financial position. All other assets are recorded at fair value. There have been no further share issues or purchases of land since the date of acquisition.

At the year end, Alpha plc has inventory acquired from Beta plc and Gamma Ltd. Beta plc had invoiced the inventory to Alpha plc for £54,000 – the cost to Beta plc had been £40,500 and Gamma Ltd had invoiced Alpha plc for £13,500 – the cost to Gamma Ltd had been £8,100. Goodwill has been impaired by £52,650. The whole of the impairment relates to Beta.

Non-controlling interests are measured using method 1.

Required:

Prepare Alpha plc's consolidated statement of financial position as at 31.12.20X9.

Question 8

The following are the statements of financial position of Garden plc, its subsidiary Rose Ltd and its associate Petal Ltd:

Statements of financial position as at 31 December 20X9

	<i>Garden</i>	<i>Rose</i>	<i>Petal</i>
	£	£	£
ASSETS			
<i>Non-current assets</i>			
Land at cost	240,000		84,000
Land at valuation		180,000	
Investment in Rose	300,000		
Investment in Petal	72,000		
Investments	18,000		
<i>Current assets</i>			
Inventories	15,000	99,000	5,400
Trade receivables	33,000	98,400	1,200
Current account – Rose	18,000		
Current account – Petal	2,400		
Cash	6,600	67,200	300
Total current assets	<u>75,000</u>	<u>264,600</u>	<u>6,900</u>
Total assets	<u>705,000</u>	<u>444,600</u>	<u>90,900</u>
EQUITY AND LIABILITIES			
£1 shares	300,000	120,000	30,000
Revaluation reserve		90,000	
Retained earnings	<u>270,000</u>	<u>216,000</u>	<u>57,600</u>
	570,000	426,000	87,600
<i>Current liabilities</i>			
Trade payables	135,000	3,600	900
Current account – Garden	—	<u>15,000</u>	<u>2,400</u>
Total equity and liabilities	<u>705,000</u>	<u>444,600</u>	<u>90,900</u>

On 1 January 20X3 Garden plc acquired 75% of Rose Ltd for £300,000 when Rose's share capital and reserves were £252,000. At the date of acquisition, the net book value of Rose's non-current assets were £90,000. Rose immediately included the revaluation in its statement of financial position.

On 1 January 20X5 Garden acquired 20% of Petal Ltd for £72,000 when the fair value of Petal's net assets were £42,000.

Goodwill has been impaired in Rose by £77,700 and in Petal by £31,800.

At the year end, Garden plc has inventory acquired from Rose and Petal. Rose had invoiced the inventory to Garden for £6,000 – the cost to Rose had been £1,200 – and Petal had invoiced Garden for £3,000 – the cost to Petal had been £1,800.

Non-controlling interests are measured using method 1.

Required:

Prepare Garden plc's consolidated statement of financial position as at 31.12.20X9.

References

- 1 IAS 28 *Investments in Associates*, IASB, revised 2003, para. 2.
- 2 *Ibid.*, para. 2.
- 3 *Ibid.*, para. 6.
- 4 *Ibid.*, para. 7.
- 5 *Ibid.*, para. 38.
- 6 *Ibid.*, para. 2.
- 7 IAS 1 *Presentation of Financial Statements*, IASB, revised 2003, Implementation Guidance.
- 8 IAS 28, para. 2.
- 9 *Ibid.*, para. 31.
- 10 *Ibid.*, para. 22.
- 11 IAS 31 *Interests in Joint Ventures*, IASB, revised 2003, para. 3.
- 12 *Ibid.*, para. 10.
- 13 *Ibid.*, para. 20.
- 14 *Ibid.*, para. 28.
- 15 *Ibid.*, para. 3.
- 16 *Ibid.*, paras 38–41.