

**Part 5**

## Chapter 23

### Borrowing costs

Question	Key issues
23.1	Specific loan with costs incurred on specific dates with investment of surplus funds; construction began after the loan was raised; construction completed before year end
23.2	General loan with costs incurred on specific dates; construction incomplete
23.3	General loan with costs incurred evenly over time; construction incomplete
23.4	General loan with costs incurred evenly over time; construction complete
23.5	Specific loan and investment of surplus funds, construction began from the date that the loan was raised and was incomplete at year end Part A: costs incurred on specific dates with investment of surplus funds and a temporary delay in construction Part B: extended delay in construction
23.6	Specific loan with costs incurred evenly; construction began from the date that the loan was raised and was complete before year end; investment of surplus funds: journals
23.7	Loans raised in a foreign currency and construction completed
23.8	Specific loan: compounding annually, payments incurred on specific days: calculations and disclosure (including tax)
23.9	Specific loans: compounding annually, payments incurred on specific days: calculations
23.10	Specific loans: compounding annually, payments incurred evenly during a period and interest on monthly opening balances: calculations
23.11	General loans: compounding annually: journals and disclosure
23.12	Specific loans and general loans combined: compounding quarterly: journals

**Question 23.1**

Money Limited began the construction of a new building on the 1 February 20X5. Construction costs incurred in 20X5 were paid for as follows:

On 1 February	C
On 1 July	500 000
On 1 November	600 000
	800 000

The construction of the building ended on the 1 December 20X5 when the building was complete and ready for its intended use. This building is to be depreciated over 10 years to a nil residual value using the straight-line method.

The construction was financed by a loan of C1 900 000 from Cash Limited. The loan was raised on 1 January 20X5 specifically to facilitate the construction of the building. The interest rate is 25% per annum. There were no capital repayments during the year. Surplus funds were invested at 20% per annum. The interest is compounded annually.

The building is a qualifying asset for the purposes of IAS 23.

**Required:**

- Calculate the amount of borrowing costs that are eligible for capitalisation during the year ended 31 December 20X5.
- Calculate the depreciation for the year ended 31 December 20X5.
- Calculate the carrying amount of the buildings as at 31 December 20X5.

**Question 23.2**

Soccer Limited began the construction of a new stadium on the 1 January 20X5. Details of the progress payments made during 20X5 are as follows:

On 1 January	C
On 1 April	300 000
On 1 July	200 000
On 1 September	250 000
On 1 October	150 000
	200 000

The stadium was still under construction at 31 December 20X5.

The construction was financed by general borrowings within the company. General loans outstanding at any one time during 20X5 averaged C20 000 000. The interest expense incurred on these loans during 20X5 was C2 600 000.

The stadium is a qualifying asset as defined by IAS 23. Interest is payable (compounded) annually.

**Required:**

- Calculate the amount of borrowing costs that may be capitalised to the stadium during the year ended 31 December 20X5.

- b) Calculate the depreciation for the year ended 31 December 20X5.
- c) Calculate the carrying amount of the stadium as at 31 December 20X5.

**Question 23.3**

Rugby Limited began the construction of a new stadium on the 1 January 20X5. Details of the progress payments made during 20X5 are as follows:

	C
1 January 20X5 – 30 April 20X5	600 000
1 May 20X5 – 31 August 20X5	300 000
1 September 20X5 – 31 December 20X5	900 000

The stadium was still under construction at 31 December 20X5.

The construction was financed by general borrowings within the company. General loans outstanding at any one time during 20X5 averaged C20 000 000. The interest expense incurred on these loans during 20X5 was C2 600 000. The financier compounds interest every 4 months.

The stadium is a qualifying asset as defined by IAS 23.

**Required:**

- a) Calculate the amount of borrowing costs that may be capitalised to the stadium during the year ended 31 December 20X5.
- b) Calculate the depreciation for the year ended 31 December 20X5.
- c) Calculate the carrying amount of the stadium as at 31 December 20X5.

**Question 23.4**

Yoodle Limited is in the process of constructing a factory building for its own use. At 31 December 20X4, a total of C450 000 had already been capitalised to the cost of the factory building.

Cash flow was becoming tight near the end of December 20X4 and therefore, in order to have sufficient resources available to the company, Yoodle Limited raised an additional loan of C400 000, costing interest of 15% per annum (effective from 1 January 20X5). This loan is to be used for a variety of purposes (it has not been raised specifically for the building costs). Yoodle Limited had an existing general loan at 1 January 20X5 of C800 000, costing interest of 10% per annum. There are no other loans. No repayments on either loan were made during 20X5 or 20X6. Interest is compounded annually.

Interest income was earned on the investment of funds from the general loans that were surplus to requirements. Interest income earned was as follows:

	C
Year ended 31 December 20X5	45 000
Year ended 31 December 20X6	92 000

The following construction costs were incurred during 20X5 (these were paid evenly over each month):

	C per month
1 January – 31 July (7 months)	70 000
1 August – 30 November (4 months)	40 000
1 – 31 December (1 month)	90 000

No construction costs were incurred during 20X6 although the builders laid a concrete slab around the base of the building on 29 January 20X6. This slab required a month to 'cure' with the result that the building could not be brought into use until 1 February 20X6. This delayed the installation of factory equipment, with the result that the factory was only brought into use on 1 March 20X6.

The building is expected to have a useful life of 10 years and a nil residual value. The straight-line method of depreciation is considered to be appropriate.

The building is a qualifying asset as defined by IAS 23.

**Required:**

Show the journal entries related to the above information in the books of Yoodle Limited for the year ended 31 December 20X5 and 20X6 and provide as much disclosure as is possible for the year ended 31 December 20X6. *Ignore tax.*

**Question 23.5**

Hockey Limited borrowed C2 000 000 (at an interest rate of 14%) from the Bank of Ball on 1 January 20X5. These funds have been borrowed in order to build a hockey stadium.

Progress payments made in 20X5 are as follows:

	C
On 1 January	600 000
On 1 July	1 200 000
On 1 September	200 000

The surplus funds were invested in a fixed deposit earning interest at 10% per annum.

The interest on both the fixed deposit and the loan are compounded annually (31 December).

Construction began on 1 January 20X5 and was still incomplete on 31 December 20X5. Between 1 June and 20 June, construction ceased while concrete cured (a necessary part of the construction process).

The stadium is a qualifying asset as defined by IAS 23.

**Required:**

- Calculate the amount of borrowing costs that may be capitalised to the hockey stadium cost account in the year ended 31 December 20X5.
- Calculate the amount of borrowing costs that may be capitalised to the hockey stadium cost account in the year ended 31 December 20X5 assuming that construction could not

begin due to the building plans not meeting municipal standards. The plans have been re-submitted and it is expected that the municipality will give the go-ahead to begin construction in early 20X6.

### Question 23.6

On 1 January 20X5, Junk Limited issued 1 million C5 debentures. The debentures are compulsory redeemable on the 31 December 20X9, at C7 each. They bear interest at 12%, payable annually. The effective interest rate is 17.6319%. These funds are to be used exclusively for the construction of a head office building.

Construction of the head office began on 1 January 20X5. Junk Limited spent C2 700 000 on the construction thereof (this was incurred evenly over the period of construction).

Construction was complete and the building was ready for use on the 30 November 20X5. The useful life of the building was 10 years and the residual value is estimated at C1 000 000. Surplus funds from the debenture issue were invested and earned interest of C250 000 (earned evenly during the year).

The head office is a qualifying asset as defined by IAS 23.

### Required:

Provide all the related journal entries for the year ended 20X5. *Ignore tax.*

### Question 23.7

Jellyvog Limited is a company based in Paris. On 1 January 20X8 it began the construction of a new shopping mall in America.

Details of the progress payments made during 20X8 are as follows:

	Costs in \$
On 1 January	200 000
On 1 April	300 000
On 1 July	550 000
On 30 September	350 000

The construction of the shopping mall (considered to be a qualifying asset) was completed on 30 September 20X8 and it was let out to tenants on the same day.

The construction was financed by a foreign loan of \$1.5 million raised on the 1 January 20X8 (raised specifically to finance the mall construction). The interest rate on this loan was 15% per annum. The loan and related interest was repaid on 31 December 20X8. Surplus funds were invested in a dollar-denominated call account earning 10% interest per annum. Interest income on this account accrues annually. The balance in the dollar-denominated call account was transferred to the company's Euro-denominated call account on 31 December 20X8.

Jellyvog Limited uses the Euro as their functional currency. The average Euro/ Dollar exchange rates during 20X8 were as follows:

	Euro	Dollar
<i>Average rates in 20X8:</i>		
1 January – 31 March	6.00	: 1
1 April – 30 June	4.00	: 1
1 July – 30 September	7.00	: 1
1 October – 31 December	8.00	: 1
1 January – 31 December	6.25	: 1
<i>Spot rates in 20X8:</i>		
1 January	5.00	: 1
31 March	6.10	: 1
30 June	3.60	: 1
30 September	7.20	: 1
31 December	7.00	: 1

**Required:**

- Calculate the amount of borrowing costs that may be capitalised to the shopping mall during the year ended 31 December 20X8.
- Journalise the above
- Calculate the amounts to be expensed or included as income in the statement of comprehensive income for the year ending 31 December 20X8 assuming that the shopping mall was not considered to be a qualifying asset.

Ignore tax.

**Question 23.8**

A loan of C500 000 was raised on 1 January 20X5. This loan was raised specifically to fund the construction of a building (a qualifying asset). Interest of C50 000 is charged on this loan (10% per annum) and is compounded annually on 31 December.

Interest income of C30 000 was earned evenly during the year. Included in this amount is C9 000 earned by investing surplus funds from the specific loan in a fixed deposit between 1 July – 30 September.

Construction began on 1 March 20X5 and ended 31 August 20X5.  
Construction costs totalled C410 000 during this period.

The building was brought into use on 1 October 20X5. Buildings are depreciated at 10% per annum, straight-line to a nil residual value.

The company owns only one other item of property, plant and equipment, this being equipment with a carrying amount of C370 000 at 31 December 20X5 (C420 000 at 31 December 20X4). There have been no disposals, purchases or other movements in property, plant and equipment other than those that are evident from the information provided.

The tax authorities:

- allow interest to be deducted as it is incurred
- allow a building allowance of 5% per annum (not apportioned for part of a year)
- levy normal income tax at 30% of taxable profits.

There are no other temporary differences other than those evident from the information above.

**Required:**

- Calculate the amount of borrowing costs that must be capitalised in terms of IAS 23.
- Show all related journal entries in 20X5.
- Provide the following disclosure in the financial statements for the year ended 31 December 20X5 in as much detail as is possible:
  - Statement of comprehensive income
  - Statement of financial position
  - Accounting policy note for borrowing costs
  - Finance charges note
  - Profit before tax note
  - Property, plant and equipment note
  - Deferred tax note

*No comparatives are required.*

### Question 23.9

Loans raised specifically to fund the construction of a building (a qualifying asset):

- Loan A (10%) raised 1 January 20X5: C500 000
- Loan B (15%) raised 1 June 20X5: C400 000

C100 000 of the loan B capital was repaid on 31 July 20X5. No other loan capital was repaid. Interest was payable (compounded) annually on 31 December.

The only interest income earned during the year was interest income earned on the investment of surplus funds from the specific loans in a 6% interest account. The interest income is not compounded.

Construction costs paid for as follows:

- 31 March 20X5: C300 000
- 31 April 20X5: C100 000
- 31 July 20X5: C220 000

Commencement date: 1 March 20X5

Cessation date: 31 August 20X5.

**Required:**

Calculate the amount of borrowing costs that must be capitalised in terms of IAS 23 and journalise.

## Question 23.10

Loans specific to fund the construction of a building (a qualifying asset):

- Loan A (10%) raised 1 January 20X5: C500 000
- Loan B (15%) raised 1 June 20X5: C400 000

C100 000 of the loan B capital was repaid on 31 July 20X5. No other loan capital was repaid.

Interest was payable annually, compounded on 31 December.

Interest is charged/ earned on monthly opening balances.

The only interest income earned during the year was interest income earned on the investment of surplus funds from the specific loans in a 6% interest account. Interest income is not compounded.

Construction costs paid for as follows:

- 1 March 20X5 – 31 August 20X5: C630 000 (paid for evenly during this period)

Commencement date: 1 March 20X5

Cessation date: 31 August 20X5.

**Required:**

Calculate the amount of borrowing costs that must be capitalised in terms of IAS 23 and journalise.

## Question 23.11

Yipdeedoo Limited began construction on a building, a qualifying asset on 1 March 20X1. The construction was complete on 30 November 20X1 and brought into use from 1 January 20X2. Depreciation is provided at 10% per annum to a C100 000 residual value.

The company had the following general loans outstanding during the year:

Bank	Loan amount	Interest rate	Date loan raised	Date loan repaid
A Bank	C300 000	15%	1 January 20X1	N/A
B Bank	C200 000	10%	1 April 20X1	30 September 20X1
C Bank	C100 000	12%	1 June 20X1	31 December 20X1

The interest on the loans is compounded annually.

Construction costs:

Details	Date incurred	Amount	Comments
Laying a slab	1 March 20X1	C60 000	This is a normal process
Waiting for slab to cure	1 March – 31 March	C0	
Purchase of materials	1 April 20X1	C120 000	Incurred evenly over the months but paid at the beginning of each month
Labour costs	1 April – 30 Nov 20X1	C330 000	

Interest income of C30 000 was earned during the year.