



## **Accounting Guidance Note No. 2010/2**

Accounting guidance notes are intended for use by Australian Government reporting entities covered by:

- S49 of the *Financial Management and Accountability Act 1997*; or
- Clause 2 of Schedule 1, of the *Commonwealth Authorities and Companies Act 1997*.

The aim of the accounting guidance notes is to provide non-mandatory explanation and examples relating to the interpretation and application of Australian Accounting Standards and the Finance Minister's Orders to the above entities.

### **Accounting for Concessional Loans**

#### **Purpose**

To provide guidance on what a concessional loan is and the accounting treatment to be applied. With the use of examples, this guidance note demonstrates how to calculate the amount of the discount and its periodic unwinding as well as the journal entries required.

#### **Target audience**

This guidance note applies to Australian Government entities who issue concessional loans.

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## Applicable accounting pronouncements

- AASB 7 *Financial Instruments: Disclosures*.
- AASB 132 *Financial Instruments: Presentation*.
- AASB 139 *Financial Instruments: Recognition and Measurement*.

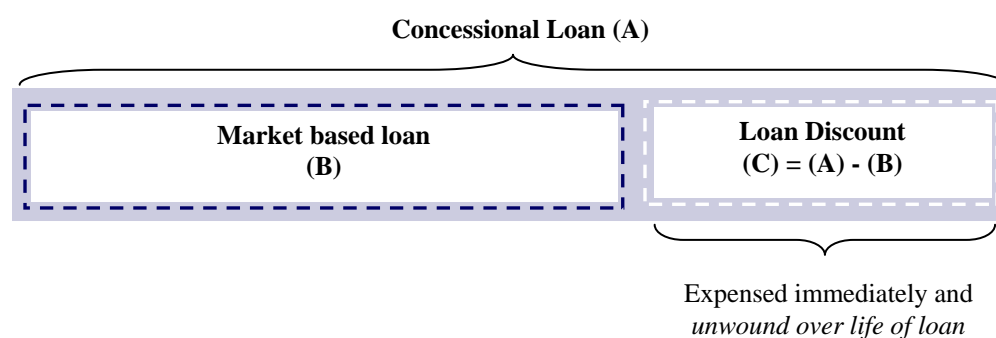
## Definitions used

Please see [Appendix 2](#) for relevant definitions.

## Key points

1. A concessional loan is a loan provided on more favourable terms than the borrower could obtain in the market place. The concession provided may be in the form of lower than market interest rates, longer loan maturity or grace periods before the payment of the principal and/or interest.

2. Put simply, a concessional loan is the government providing a market based loan to an entity as well as a ‘concessional’ component. The concessional component represents the opportunity cost of value forgone in providing the loan at a discounted rate and is referred to as the “loan discount”.



Practical Guidance → As demonstrated above, the fair value of the concessional loan comprises of a market based loan and a loan discount component.

Dr. 2423001 Concessional Loan Discount (expense)	(C)
Dr. Financial Asset (loan receivable)	(B)
Cr. Cash at bank / Appropriation receivable	(A)

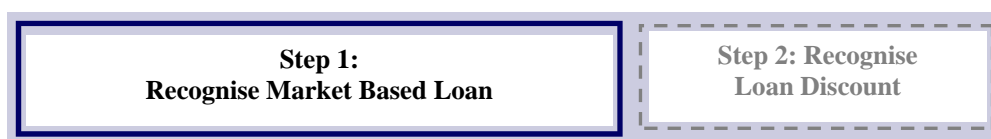
→ Also see the Illustrative Examples which explain the concept in greater detail.

## Initial Recognition

3. On initial recognition, the market based loan component and discount component must be separated and accounted for as follows.



## Step 1: Recognise Market Based Loan Component



4. As the market based loan is a financial instrument you are required to account for the loan per AASB 139. The market based loan will be recognised as an asset (loan receivable) in the balance sheet and measured as follows:

- If the loan is classified as *loans and receivables* under AASB 139.45 the amount recognised on initial recognition will be the fair value of the loan plus transaction costs.
- If the loan is classified as *fair value through profit or loss* under AASB 139.45 the amount recognised on initial recognition will only include the fair value of the loan as transaction costs will be expensed immediately on recognition.

Practical Guidance → Transaction costs are costs that are directly attributable to the acquisition or issue of the financial asset e.g. fees and commissions, levies, transfer taxes and duties. See AASB 139.AG 13 for more information.

5. It is unlikely that the default financial classification of *available-for-sale financial assets* will be applicable for concessional loans as they generally meet the definition of *loans and receivables*.

6. While the fair value of a financial instrument is normally its transaction price (i.e the fair value of the consideration given), due to the concessional arrangement the fair value of the market based loan must be estimated through the use of a valuation technique.

7. A commonly used valuation technique in the Commonwealth is discounted cash flow analysis. Under discounted cash flow analysis the fair value of the market rate loan is estimated as the present value of all future cash receipts discounted using the prevailing market(s) rate of interest the borrowing entity would be subject to in the market for a similar instrument (in terms of currency, term, type of interest rate and other factors) with a similar credit rating.

Practical Guidance → The cash flows are discounted by the rate the borrowing entity, not the issuer, would be subject to in the market. For example, if a Commonwealth entity provides a concessional loan to a foreign country the cash flows would be discounted by the rate the foreign country would be required to pay if it borrowed in the market if the concessional loan was not provided.

→ Expert advice may be necessary to determine the market rate. A standard bank lending rate would need to be adjusted to take into consideration the risks associated with the borrower.

→ Illustrative examples 1 - 4 use discounted cash flow analysis to measure the fair value of the market based loan.

→ For more information regarding the use of valuation techniques including discounted cash flow analysis see AASB 139.48A.

## Step 2: Recognise Discount Component



8. On initial recognition the discount component of the concessional loan will be recognised in the Statement of Comprehensive Income as an expense. The discount component is recognised as the difference between the nominal value of the loan and the fair value of the market based loan.

**Practical Guidance** → For example, consider a four year \$700,000 concessional loan provided at a rate of 3.45%, with a market rate of 7.45%. The nominal value of a concessional loan is \$700,000 and the fair value of the market based loan component is \$639,216 (PV at market rate of 7.45%). The discount component will be equal to \$700,000 – \$639,216 = \$60,784. The entity would post the following journal:

Dr. 2423001 Concessional Loan Discount (expense)	60,784	
Dr. Financial Asset (loan receivable)	639,216	
Cr. Cash at bank		700,000

While Commonwealth Authorities and Companies (CAC) Act entities would credit 'cash at bank' Financial Management and Accountability (FMA) Act agencies would draw the funds from their appropriations (4100001 or 1280004 Approps).

→ See Illustrative examples for additional information.

## ***Subsequent Accounting***

### Step 3: Subsequent Accounting - Market Based Loan Component

9. Subsequent accounting treatment of the market based loan component depends on the category of financial asset chosen under AASB 139.45. Although the facts and circumstances need to be assessed on a case-by-case basis, concessional loans are generally categorised as *loans and receivables*.

**Practical Guidance** → If 'fair value through profit or loss' is designated on initial recognition, please contact Accounting Policy Branch (see contact details) for additional guidance.

10. The accounting standards require *loans and receivables* to be measured at amortised cost using the effective interest method, with changes in the amortised cost to be recognised in the Statement of Comprehensive Income.

11. The amortised cost of the market based loan can be calculated as follows:

The initial carrying amount of the market based loan at initial recognition ()	<b><i>a</i></b>
<i>Plus:</i> Interest accrued using the effective interest method*	<b><i>b</i></b>
<i>Minus:</i> Principal repayments and interest payments	<b><i>(c)</i></b>
<i>Minus:</i> Reduction for impairment or uncollectability	
<b>Amortised Cost</b>	<b><i>d</i></b>

12. Amortised cost is commonly presented in an amortisation schedule. An example of an amortisation schedule is provided below based on Illustrative Example 1. Each component of amortised cost is explained in the paragraphs below.

Year	(a) Amortised cost at start of year	(b) = (a) x 7.45% Income (using effective rate method)	(c) Cash flows	(d) = (a) + (b) – (c) Amortised cost at end of year
1	\$639,216*	\$47,622	\$199,150	\$487,688
2	\$487,688	\$36,333	\$193,113	\$330,908
3	\$330,908	\$24,653	\$187,075	\$168,486
4	\$168,486	\$12,552	\$181,038	0
Total			\$760,376	

Source: Illustrative Example 1: Table 2

(a) Carrying amount of market based loan

13. On initial recognition the market based loan is recognised at fair value, as calculated in Step 1: Recognise Market Based Loan Component. Subsequently, the carrying amount of the market based loan is calculated as the fair value on initial recognition *plus* income recognised using the effective rate method *less* principal and interest payments and any reduction for impairment or uncollectability.

(b) Income (using the effective rate method)

14. The effective interest method is a method of calculating the amortised cost of a financial asset or financial liability and allocating the interest income or expense over the relevant period.

15. The effective interest rate is the rate that exactly discounts estimated future principal and interest receipts through the expected life of the concessional loan (AASB 139.9).

Practical  
Guidance

→ This can be illustrated through the above amortisation schedule in paragraph 11. Column (b) applies an effective interest rate of 7.45% on the carrying amount of the market based loan. This rate exactly discounts estimated future cash payments through the life of the financial instrument, resulting in an amortised cost of zero at the end of the concessional loan.

→ There are many ways to calculate the effective interest rate method. Microsoft Excel Goal Seek tool and the Internal Rate of Return (IRR) formula function can be used to perform these calculations. For the purpose of this guidance note, the Goal Seek tool has been used to calculate the effective interest method.

→ The effective interest rate will generally be equal to the market rate of the market based loan component. Please see the illustrative examples for more information.

16. Income calculated using the effective interest method can be further separated into two components: interest income and unwinding of the discount. This is explained in Step 4: Subsequent Accounting – Discount Component.

(c) Cash flows – Principal and interest payments

17. This consists of principal repayments and interest receipts (not applicable if interest free).

Step 4: Subsequent Accounting – Discount Component

18. The discount component which was expensed on initial recognition will subsequently be unwound (written back) over the remaining life of the loan.

Practical Guidance

→ Take for example a 2 year concessional loan for \$900, with an initial discount expense of \$100. On initial recognition the market loan component will be recognised in the balance sheet and the discount component will be expensed:

Dr. Financial Asset (loan receivable)	800	
Dr. 2423001 Concessional Loan Discount (expense)	100	
Cr. Cash at bank		900

→ Over the next 2 years the expense of \$100 will need to be unwound or 'written back' to ensure the receivable will equal \$900 at the end of the loan, as this is the amount which will be received from the borrower. For simplicity assume the expense is unwound at the end of each year by \$50. The following journal would be posted at the end of years 1 and 2 to recognise the unwinding of the discount.

Dr. Financial Asset (loan receivable)	50	
Cr. 1234001 Unwind Concessional Loan Discount (income)		50

→ At the end of year two the discount is fully unwound resulting in the full receivable of \$900, which is the amount to be received from the borrower. When the loan is repaid the following journal is posted:

Dr. Cash at bank	900	
Cr. Financial Asset (loan receivable)		900

→ As demonstrated above, the unwinding of the concessional loan discount expense should be recorded in account 1234001 'Unwind Concessional Loan Discount' as part of interest and dividends.

19. As demonstrated in the table below, the unwinding of the discount (*d*) is the difference between income calculated using the effective interest method (*b*) and interest income (*c*).

Year	(a) Opening loan discount	(b) Total Income (table 2)	(c) Interest Income	(d) = (b) – (c) Income from unwinding of discount	(e) = (a) – (d) Unexpired loan discount
1	\$60,784	\$47,622	\$24,150	\$23,472	\$37,312
2	\$37,312	\$36,333	\$18,113	\$18,220	\$19,092
3	\$19,092	\$24,653	\$12,075	\$12,578	\$6,514
4	\$6,514	\$12,552	\$6,038	\$6,514	0
			\$60,376		

Source: Illustrative Example 1: Table 3

## Disclosure requirements

20. Extensive disclosures are required for Financial Instruments per AASB 7 *Financial Instruments: Disclosures*. Accounting Guidance Note 2008/1 AASB 7 *Financial Instrument: Disclosures* provides guidance on the disclosure requirements for financial instruments.

21. Section 45.7 of the Finance Minister's Orders requires entities to disclose the nominal value of concessional loans as well as the unexpired discount. An illustration of the disclosure required can be found in the Forms of Financial Statements.

Practical Guidance → The unexpired discount is the difference between the discount component of the concessional loan recognised on initial recognition and any subsequent unwinding (writing back) of the discount component.

→ See Illustrative examples 1 – 4: table 3, for detailed calculations.

## Budget Implications

The impact on fiscal balance over the entire life of the loan is the actual interest earned on the concessional loan arrangement.

Transaction	Fiscal Balance	Underlying Cash Balance
1. Initial Recognition - Loan Component	Nil impact (no impact on net operating balance from operations or non-financial assets)	Nil impact (loan component is treated as an investment in financial assets cash outflow not an operating outflow)
2. Initial Recognition - Discount Component	Worsen (discount expense reduces net operating balance)	Nil impact (no operating cash flow activity)
3. Principal Repayment	Nil impact (no impact on net operating balance from operations or non-financial assets)	Nil impact (principal repayment is treated as an investment in financial assets cash inflow)
4. Cash interest received (interest income)	Improve (interest income increases revenue)	Improve (interest cash inflow treated as an operating cash inflow).
5. Unwinding of discount component	Improve (increases income)	Nil impact (no cash impact)

## Contacts

Questions or comments about this Guidance Note should be addressed to Accounting Policy Branch at [accountingpolicy@finance.gov.au](mailto:accountingpolicy@finance.gov.au)

## Appendix 1

### *Illustrative example 1 – Below-market rate loan*

On 1 July 2009 a Commonwealth agency agrees to provide a \$700,000 loan to a not-for-profit organisation to assist in providing shelter to the homeless in the A.C.T. The loan is provided on the following terms:

- Principal: \$700,000 to be repaid evenly over the loan term (\$175,000 pa).
- Loan interest rate: 3.45%.
- Term: 4 years.

Interest is calculated on the amount outstanding at the beginning of the year. If borrowing in the market the borrowing entity would be subject to a rate of 7.45%. Cash flows occur at the end of the each year.

### **Answer:**

In accordance with the economic substance of transaction, the agency would be required to separate the loan into its component parts; a market rate loan and the discount component of the loan.

### *Initial Recognition – market based loan component and discount component*

On initial recognition the market rate loan will be recognised at fair value. Fair value is estimated as the present value of all future cash receipts discounted using the prevailing market rate of interest for a similar instrument, which in this case is 7.45%. The present value of the future cash flows at both the concessional rate and the market rate can be illustrated in the following table:

Year	Principal Repayment	Interest Payment	Total Cash flows	PV Loan Rate 3.45% (a)	PV Market Rate 7.45% (b)
1	\$175,000	\$24,150 (700,000 * 0.0345)	\$199,150	\$192,508 $199,150 / (1.0345)^1$	\$185,342 $199,150 / (1.0745)^1$
2	\$175,000	\$18,113 (525,000 * 0.0345)	\$193,113	\$180,447 $193,113 / (1.0345)^2$	\$167,263 $193,113 / (1.0745)^2$
3	\$175,000	\$12,075 (350,000 * 0.0345)	\$187,075	\$168,976 $187,075 / (1.0345)^3$	\$150,798 $187,075 / (1.0745)^3$
4	\$175,000	\$6,038 (175,000 * 0.0345)	\$181,038	\$158,069 $181,038 / (1.0345)^4$	\$135,814 $181,038 / (1.0745)^4$
<b>Total</b>	<b>\$700,000</b>	<b>\$60,376</b>	<b>\$760,376</b>	<b>\$700,000 (a)</b>	<b>\$639,216 (b)</b>

Table 1: Discounted cash flow analysis.

The difference between the fair value of the loan at the concessional rate of 3.45% (a) and the fair value of the loan at the market rate of 7.45% (b) represents the discount implicit in the loan:

$$\begin{aligned} \text{Loan Discount} &= (a) - (b) \\ &= \$700,000 - \$639,216 \\ &= \mathbf{\$60,784} \end{aligned}$$

On initial recognition the issuer would post the following journal to recognise the fair value of the market rate loan at 7.45% and the expense associated with the discount component of the loan (as calculated above):

	Debit	Credit
<b>1 July 2009 – Recognise loan / discount component</b>		
Dr. Financial Asset (loan receivable)	639,216	
Dr. 2423001 Concessional Loan Discount	60,784	
Cr. Cash at bank		700,000

### *Subsequent Measurement*

Subsequent to initial recognition, the entity classifies the market based loan as a *loan and receivable* and measures the financial asset at amortised cost using the effective interest method (AASB139.46(a)). The entity has calculated an effective interest rate at 7.45%, with the use of Excel's Goal Seek tool.

The following amortisation schedule outlines the amortisation of the market rate loan, and illustrates how the effective interest method discounts estimated future principal and interest receipts through the expected life of the loan:

Year	(a) Amortised cost at start of year	(b) = (a) x 7.45% Income (using effective rate method)	(c) Cash flows*	(d) = (a) + (b) - (c) Amortised cost at end of year
1	\$639,216*	\$47,622	\$199,150	\$487,688
2	\$487,688	\$36,333	\$193,113	\$330,908
3	\$330,908	\$24,653	\$187,075	\$168,486
4	\$168,486	\$12,552	\$181,038	0

**Table 2: Amortisation Schedule – market based loan.**

\* see table 1 above for detailed calculations.

The following table illustrates the unwinding of the loan discount, which is calculated as the difference between the loan discount on initial recognition and any subsequent unwinding (writing back) of the discount component.

Year	(a) Opening loan discount	(b) Total Income (table 2)	(c) Interest Income*	(d) = (b) – (c) Income from unwinding of discount	(e) = (a) – (d) Unexpired loan discount
1	\$60,784	\$47,622	\$24,150	\$23,472	\$37,312
2	\$37,312	\$36,333	\$18,113	\$18,220	\$19,092
3	\$19,092	\$24,653	\$12,075	\$12,578	\$6,514
4	\$6,514	\$12,552	\$6,038	\$6,514	0

**Table 3: Calculation of unwinding of discount and unexpired discount.**

\* see table 1 above for detailed calculation of interest payments.

### *Journal entries*

The following journals will be posted at the end of each financial year to recognise the principal repayments (\$175,000 p.a.):

<b>Principal repayments</b>	<b>30/06/2010</b>	<b>30/06/2011</b>	<b>30/06/2012</b>	<b>30/06/2013</b>
Dr. Cash at bank	175,000	175,000	175,000	175,000
Cr. Financial Asset (loan receivable)	175,000	175,000	175,000	175,000

The following journals will be posted at the end of each financial year to recognise interest income and the unwinding of the discount:

<b>Interest income – table 3: (c)</b>	<b>30/06/2010</b>	<b>30/06/2011</b>	<b>30/06/2012</b>	<b>30/06/2013</b>
Dr. Cash at bank	24,150	18,113	12,075	6,038
Cr. Interest Income	24,150	18,113	12,075	6,038

<b>Unwinding discount – table 3: (d)</b>	<b>30/06/2010</b>	<b>30/06/2011</b>	<b>30/06/2012</b>	<b>30/06/2013</b>
Dr. Financial Asset (loan receivable)	23,472	18,220	12,578	6,514
Cr. 1234001 Unwind Concessional Loan discount	23,472	18,220	12,578	6,514

*Illustrative example 2 – Interest free loan*

On 1 July 2009 a Commonwealth agency agrees to provide a \$700,000 loan to a not-for-profit organisation to assist in providing shelter to the homeless in the A.C.T. The loan is provided on the following terms:

- Principal: \$700,000 to be repaid evenly over the loan term (\$175,000 pa).
- Loan interest rate: **Interest free.**
- Term: 4 years.

Interest is calculated on the amount outstanding at the beginning of the year. If borrowing in the market the borrowing entity would be subject to a rate of 7.45%. Cash flows occur at the end of the each year.

**Answer:**

*Initial Recognition – market based loan component and discount component*

The fair value of the market based loan component is estimated as the present value of the cash flows (principal repayments) discounted using the prevailing market rate of interest for a similar instrument, which in this case is 7.45%. The present value of the future cash flows at both the concessional rate and the market rate can be illustrated in the following table

Year	Principal Repayment	Interest Payment	Total Cash flows	PV Loan Rate 0% (a)	PV Market Rate 7.45% (b)
1	\$175,000	-	\$175,000	\$175,000 $175,000 / (1.00)^1$	\$162,866 $175,000 / (1.0745)^1$
2	\$175,000	-	\$175,000	\$175,000 $175,000 / (1.00)^2$	\$151,574 $175,000 / (1.0745)^2$
3	\$175,000	-	\$175,000	\$175,000 $175,000 / (1.00)^3$	\$141,065 $175,000 / (1.0745)^3$
4	\$175,000	-	\$175,000	\$175,000 $175,000 / (1.00)^4$	\$131,284 $175,000 / (1.0745)^4$
<b>Total</b>	<b>\$700,000</b>	<b>-</b>	<b>\$700,000</b>	<b>\$700,000 (a)</b>	<b>\$586,789 (b)</b>

Table 1: Discounted cash flow analysis.

The difference between the fair value of the interest free loan and the fair value of the loan at the market rate of 7.45% (b) represents the discount implicit in the loan:

$$\begin{aligned}
 \text{Loan Discount} &= (a) - (b) \\
 &= \$700,000 - \$586,789 \\
 &= \mathbf{\$113,211}
 \end{aligned}$$

On initial recognition the issuer would post the following journal to recognise the fair value of the market rate loan at 7.45% and the expense associated with the discount component of the loan (as calculated above):

	Debit	Credit
<b>1 July 2009 – Recognition of loan &amp; discount component</b>		
Dr. Financial Asset (loan receivable)	586,789	
Dr. 2423001 Concessional Loan Discount	113,211	
Cr. Cash at bank		700,000

### *Subsequent Measurement*

Subsequent to initial recognition, the entity classifies the market based loan as a *loan and receivable* and measures the financial asset at amortised cost using the effective interest method (AASB139.46(a)). The entity has calculated an effective interest rate at 7.45%, with the use of Excel's Goal Seek tool.

The following amortisation schedule outlines the amortisation of the market rate loan, and illustrates how the effective interest method discounts estimated future principal and interest receipts through the expected life of the loan:

Year	(a) Amortised cost at start of year	(b) = (a) x 7.45% Income (using effective rate method)	(c) Cash flows*	(d) = (a) + (b) – (c) Amortised cost at end of year
1	\$586,789*	\$43,716	\$175,000	\$455,505
2	\$455,505	\$33,935	\$175,000	\$314,440
3	\$314,440	\$23,426	\$175,000	\$162,866
4	\$162,866	\$12,134	\$175,000	0

**Table 2: Amortisation Schedule – market based loan.**

\* see table 1 above for detailed calculations.

The following table illustrates the unwinding of the loan discount, which is calculated as the difference between the loan discount on initial recognition and any subsequent unwinding (writing back) of the discount component.

Year	(a) Opening loan discount	(b) Total Income (table 2)	(c) Interest Income*	(d) = (b) – (c) Income from unwinding of discount	(e) = (a) – (d) Unexpired loan discount
1	\$113,211	\$43,716	\$0	\$43,716	\$69,495
2	\$69,495	\$33,935	\$0	\$33,935	\$35,560
3	\$35,560	\$23,426	\$0	\$23,426	\$12,134
4	\$12,134	\$12,134	\$0	\$12,134	0

**Table 3: Calculation of unwinding of discount and unexpired discount.**

\* see table 1 above for detailed calculation of interest payments.

*Journal entries*

The following journals will be posted at the end of each financial year to recognise the principal repayments (\$175,000 p.a.):

<b>Principal repayments</b>	<b>30/06/2010</b>	<b>30/06/2011</b>	<b>30/06/2012</b>	<b>30/06/2013</b>
Dr. Cash at bank	175,000	175,000	175,000	175,000
Cr. Financial Asset (loan receivable)	175,000	175,000	175,000	175,000

The following journals will be posted at the end of each financial year to recognise the unwinding of the discount:

<b>Unwinding discount – table 3: (d)</b>	<b>30/06/2010</b>	<b>30/06/2011</b>	<b>30/06/2012</b>	<b>30/06/2013</b>
Dr. Financial Asset (loan receivable)	43,716	33,935	23,426	12,134
Cr. 1234001 Unwind Concessional Loan discount	43,716	33,935	23,426	12,134

*Illustrative example 3 – Below market rate loan with grace period*

On 1 July 2009 a Commonwealth agency agrees to provide a \$700,000 loan to a not-for-profit organisation to assist in providing shelter to the homeless in the A.C.T. As most costs are incurred during the beginning of the project, the government has granted the agency a two year grace period. The loan is provided on the following terms:

- Principal: \$700,000 to be repaid in even instalments over years 3-6 (\$175,000 pa).
- Loan interest rate: 3.45%.
- Term: Years 1-2 *Grace Period* – no principal repayments  
Years 3-6 – Interest and principal repayments

Interest is calculated on the amount outstanding at the beginning of the year. If borrowing in the market the borrowing entity would be subject to a rate of 7.45%. Cash flows occur at the end of the each year.

**Answer:**

*Initial Recognition – market based loan component and discount component*

The fair value of the market based loan component is estimated as the present value of the interest and principal repayments discounted using the prevailing market rate of interest for a similar instrument, which in this case is 7.45%.

Year	Principal Repayment	Interest Payment	Total Cash flows	PV Loan Rate 3.45% (a)	PV Market Rate 7.45% (b)
1	<i>Grace Period</i>	\$24,150 (700,000 * 0.0345)	\$24,150	\$23,345 24,150 / (1.0345) <sup>1</sup>	\$22,476 24,150 / (1.0745) <sup>1</sup>
2	<i>Grace Period</i>	\$24,150 (700,000 * 0.0345)	\$24,150	\$22,566 24,150 / (1.0345) <sup>2</sup>	\$20,917 24,150 / (1.0745) <sup>2</sup>
3	\$175,000	\$24,150 (700,000 * 0.0345)	\$199,150	\$179,882 199,150 / (1.0345) <sup>3</sup>	\$160,532 199,150 / (1.0745) <sup>3</sup>
4	\$175,000	\$18,113 (525,000 * 0.0345)	\$193,113	\$168,612 193,113 / (1.0345) <sup>4</sup>	\$144,872 193,113 / (1.0745) <sup>4</sup>
5	\$175,000	\$12,075 (350,000 * 0.0345)	\$187,075	\$157,893 187,075 / (1.0345) <sup>5</sup>	\$130,612 187,075 / (1.0745) <sup>5</sup>
6	\$175,000	\$6,038 (175,000 * 0.0345)	\$181,038	\$147,702 181,038 / (1.0345) <sup>6</sup>	\$117,633 181,038 / (1.0745) <sup>6</sup>
<b>Total</b>	<b>\$700,000</b>	<b>\$108,676</b>	<b>\$808,676</b>	<b>\$700,000 (a)</b>	<b>\$597,042 (b)</b>

The difference between the fair value of the loan at the concessional rate of 3.45% (a) and the fair value of the loan at the market rate of 7.45% (b) represents the discount implicit in the loan:

$$\begin{aligned} \text{Loan Discount} &= (a) - (b) \\ &= \$700,000 - \$597,042 \\ &= \mathbf{\$102,958} \end{aligned}$$

On initial recognition the issuer would post the following journal to recognise the fair value of the market rate loan at 7.45% and the expense associated with the discount component of the loan (as calculated above):

	Debit	Credit
<b>1 July 2009 – Recognition of loan &amp; discount component</b>		
Dr. Financial Asset (loan receivable)	597,042	
Dr. 2423001 Concessional Loan Discount	102,958	
Cr. Cash at bank		700,000

#### *Subsequent Measurement*

Subsequent to initial recognition, the entity classifies the market based loan as a *loan and receivable* and measures the financial asset at amortised cost using the effective interest method (AASB139.46(a)). The entity has calculated an effective interest rate at 7.45%, with the use of Excel's Goal Seek tool.

The following amortisation schedule outlines the amortisation of the market rate loan, and illustrates how the effective interest method discounts estimated future principal and interest receipts through the expected life of the loan:

Year	(a) Amortised cost at start of year	(b) = (a) x 7.45% Income (using effective rate method)	(c) Cash flows*	(d) = (a) + (b) – (c) Amortised cost at end of year
1	\$597,042*	\$44,480	\$24,150	\$617,372
2	\$617,372	\$45,994	\$24,150	\$639,216
3	\$639,216	\$47,622	\$199,150	\$487,688
4	\$487,688	\$36,333	\$193,113	\$330,908
5	\$330,908	\$24,653	\$187,075	\$168,486
6	\$168,486	\$12,552	\$181,038	0

**Table 2: Amortisation Schedule – market based loan.**

\* see table 1 above for detailed calculations.

The following table illustrates the unwinding of the loan discount, which is calculated as the difference between the loan discount on initial recognition and any subsequent unwinding (writing back) of the discount component.

Year	(a) Opening loan discount	(b) Total Income (table 2)	(c) Interest Income*	(d) = (b) – (c) Income from unwinding of discount	(e) = (a) – (d) Unexpired loan discount
1	\$102,958	\$44,480	\$24,150	\$20,330	\$82,628
2	\$82,628	\$45,994	\$24,150	\$21,844	\$60,784
3	\$60,784	\$47,622	\$24,150	\$23,472	\$37,312
4	\$37,312	\$36,333	\$18,113	\$18,220	\$19,092
5	\$19,092	\$24,653	\$12,075	\$12,578	\$6,514
6	\$6,514	\$12,552	\$6,038	\$6,514	0

**Table 3: Calculation of unwinding of discount and unexpired discount.**

\* see table 1 above for detailed calculation of interest payments.

### Journal entries

The following journals will be posted at the end of each financial year following the grace period to recognise the principal repayments (\$175,000 p.a.):

Principal repayments	30/06/2012	30/06/2013	30/06/2014	30/06/2015
Dr. Cash at bank	175,000	175,000	175,000	175,000
Cr. Financial Asset (loan receivable)	175,000	175,000	175,000	175,000

The following journals will be posted at the end of each financial year to recognise interest income and the unwinding of the discount:

Total Income – table 3: (c) & (d)	30/06/2010	30/06/2011	30/06/2012
Dr. Cash at bank	24,150	24,150	24,150
Dr. Financial Asset (loan receivable)	20,330	21,844	23,472
Cr. Interest Income	24,150	24,150	24,150
Cr. 1234001 Unwind Concessional Loan discount	20,330	21,844	23,472

Total Income - table 3: (c) & (d)	30/06/2013	30/06/2014	30/06/2015
Dr. Cash at bank	18,113	12,075	6,038
Dr. Financial Asset (loan receivable)	18,220	12,578	6,515
Cr. Interest Income	18,113	12,075	6,038
Cr. 1234001 Unwind Concessional Loan discount	18,220	12,578	6,515

*Illustrative example 4 – Interest free loan with grace period*

On 1 July 2009 a Commonwealth agency agrees to provide a \$700,000 loan to a not-for-profit organisation to assist in providing shelter to the homeless in the A.C.T. The loan is provided on the following terms:

- Principal: \$700,000 to be repaid evenly over the loan term (\$175,000 pa).
- Loan interest rate: **Interest free.**
- Term: Years 1-2 *Grace Period* – no principal or interest repayments  
Years 3-6 – Principal repayments, no interest repayments

Interest is calculated on the amount outstanding at the beginning of the year. If borrowing in the market the borrowing entity would be subject to a rate of 7.45%. Cash flows occur at the end of the each year.

**Answer:**

*Initial Recognition – market based loan component and discount component*

The fair value of the market based loan component is estimated as the present value of the interest and principal repayments discounted using the prevailing market rate of interest for a similar instrument, which in this case is 7.45%.

Year	Principal Repayment	Interest Payment	Total Cash flows	PV Loan Rate 0% (a)	PV Market Rate 7.45% (b)
1	<i>Grace Period</i>	-	-	-	-
2	<i>Grace Period</i>	-	-	-	-
3	\$175,000	-	\$175,000	\$175,000 $175,000 / (1.00)^3$	\$171,065 $175,000 / (1.0745)^3$
4	\$175,000	-	\$175,000	\$175,000 $175,000 / (1.00)^4$	\$131,284 $175,000 / (1.0745)^4$
5	\$175,000	-	\$175,000	\$175,000 $175,000 / (1.00)^5$	\$122,182 $175,000 / (1.0745)^5$
6	\$175,000	-	\$175,000	\$175,000 $175,000 / (1.00)^6$	\$113,710 $175,000 / (1.0745)^6$
<b>Total</b>	<b>\$700,000</b>	<b>\$0</b>	<b>\$700,000</b>	<b>\$700,000 (a)</b>	<b>\$508,241 (b)</b>

The difference between the fair value of the interest free loan and the fair value of the loan at the market rate of 7.45% (b) represents the discount implicit in the loan:

$$\begin{aligned}
 \text{Loan Discount} &= (a) - (b) \\
 &= \$700,000 - \$508,241 \\
 &= \mathbf{\$191,759}
 \end{aligned}$$

On initial recognition the issuer would post the following journal to recognise the fair value of the market rate loan at 7.45% and the expense associated with the discount component of the loan (as calculated above):

	Debit	Credit
<b>1 July 2009 – Recognition of Loan</b>		
Dr. Financial Asset (loan receivable)	508,241	
Dr. 2423001 Concessional Loan Discount	191,759	
Cr. Cash at bank		700,000
<i>To recognise loan in issuers books</i>		

#### *Subsequent Measurement*

Subsequent to initial recognition, the entity classifies the market based loan as a *loan and receivable* and measures the financial asset at amortised cost using the effective interest method (AASB139.46(a)). The entity has calculated an effective interest rate at 7.45%, with the use of Excel's Goal Seek tool.

The following amortisation schedule outlines the amortisation of the market rate loan, and illustrates how the effective interest method discounts estimated future principal and interest receipts through the expected life of the loan:

Year	(a) Amortised cost at start of year	(b) = (a) x 7.45% Income (using effective rate method)	(c) Cash flows*	(d) = (a) + (b) – (c) Amortised cost at end of year
1	\$508,241*	\$37,864	0	\$546,105
2	\$546,105	\$40,685	0	\$586,790
3	\$586,790	\$43,715	\$175,000	\$455,505
4	\$455,505	\$33,935	\$175,000	\$314,440
5	\$314,440	\$23,426	\$175,000	\$162,866
6	\$162,866	\$12,134	\$175,000	0

**Table 2: Amortisation Schedule – market based loan.**

\* see table 1 above for detailed calculations.

The following table illustrates the unwinding of the loan discount, which is calculated as the difference between the loan discount on initial recognition and any subsequent unwinding (writing back) of the discount component.

Year	(a) Opening loan discount	(b) Total Income (table 2)	(c) Interest Income*	(d) = (b) – (c) Income from unwinding of discount	(e) = (a) – (d) Unexpired loan discount
1	\$191,759	\$37,864	0	\$37,864	\$153,895
2	\$153,895	\$40,685	0	\$40,685	113,210
3	113,210	\$43,715	0	\$43,715	69,495
4	69,495	\$33,935	0	\$33,935	35560
5	35560	\$23,426	0	\$23,426	12,134
6	12,134	\$12,134	0	\$12,134	0

**Table 3: Calculation of unwinding of discount and unexpired discount.**

\* see table 1 above for detailed calculation of interest payments.

### *Journal entries*

The following journals will be posted at the end of each financial year following the grace period to recognise the principal repayments (\$175,000 p.a.):

<b>Principal repayments</b>	<b>30/06/2012</b>	<b>30/06/2013</b>	<b>30/06/2014</b>	<b>30/06/2015</b>
Dr. Cash at bank	175,000	175,000	175,000	175,000
Cr. Financial Asset (loan receivable)	175,000	175,000	175,000	175,000

The following journals will be posted at the end of each financial year to recognise the unwinding of the discount:

<b>Unwinding discount – table 3: (d)</b>	<b>30/06/2010</b>	<b>30/06/2011</b>	<b>30/06/2012</b>
Dr. Financial Asset (loan receivable)	37,864	40,685	43,715
Cr. 1234001 Unwind Concessional Loan discount	37,864	40,685	43,715

<b>Unwinding discount – table 3: (d)</b>	<b>30/06/2013</b>	<b>30/06/2014</b>	<b>30/06/2015</b>
Dr. Financial Asset (loan receivable)	33,395	23,426	12,134
Cr. 1234001 Unwind Concessional Loan discount	33,395	23,426	12,134

### Definitions used in Guidance Note 2010/2

- *Amortised cost of a financial asset or financial liability* is the amount at which the financial asset or financial liability is measured at initial recognition minus principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between that initial amount and the maturity amount, and minus any reduction (directly or through the use of an allowance account) for impairment or uncollectibility (AASB 139.9).
- *Effective Interest Rate Method* is a method of calculating the amortised cost of a financial asset or a financial liability (or group of financial assets or financial liabilities) and of allocating the interest income or interest expense over the relevant period (AASB 139.9).
- *Fair value* is the amount for which an asset could be exchanged or a liability settled, between knowledgeable, willing parties in an arm's length transaction. (AASB 139.9)
- A *financial instrument* is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. (AASB 132.11)
- *Financial asset* is any asset that is:
  - Cash;
  - An equity instrument of another entity;
  - A contractual right to receive cash or another financial asset from another entity or to exchange financial assets/liabilities with another entity under conditions that are potentially favourable to the entity;
  - A contract that will or may be settled in the entity's own equity instruments and is:
    - a non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments; or
    - a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. (AASB 132.11)
- *Loans and Receivables* are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market, other than:
  - those that the entity intends to sell immediately or in the near term, which shall be classified as held for trading, and those that the entity upon initial recognition designates as at fair value through profit or loss;

- those that the entity upon initial recognition designates as available for sale; or
  - those for which the holder may not recover substantially all of its initial investment, other than because of credit deterioration, which shall be classified as at available for sale. (AASB 139.9)
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- Transaction costs are incremental costs that are directly attributable to the acquisition, issue or disposal of a financial asset or financial liability. An incremental cost is one that would not have been incurred if the entity had not acquired, issued or disposed of the financial instrument (AASB 139.9).