

FINANCIAL ACCOUNTING 700 Seminar RS 5 – Suggested solution <i>PH Ferreira</i>	DEPARTMENT OF ACCOUNTING UP
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SUGGESTED SOLUTION TO QUESTION 1

- 2.1 Interest accrues on a daily basis and must be allocated on a daily basis, using the effective interest method. Lender is entitled to accrued interest. [IAS 18.30(a)].
- 2.2 Preference dividends are recognised as income on 31 December. It is the date on which the shareholders' right to receive payment is established. [IAS 18.30(c)].

[Note that the right to receive payment is established on the date that a share trades ex-dividend. A share trades ex-dividend as from registration date (the date that a shareholder has to be included in the register of shareholders in order to receive a dividend). Therefore, an investor who buys a share after registration date will not compensate the previous owner of the share for the accrued dividend, as the dividend will be paid by the company directly to the previous owner.

It should also be noted that share investments are normally carried at fair value. When a dividend is declared by a company, the fair value of a share will increase with the amount of the dividend (cum-dividend). This will result in a fair value adjustment (gain) being recognised by the investor when a dividend is declared. At registration date the share begins to trade ex-dividend, resulting in a reduction in the fair value, which again gives rise to a fair value adjustment for the investor, but this time a loss. However, at this date the investor should recognise the actual dividend as income, resulting in an increase in profits, with the result that the net effect on equity at registration date is zero. The financial statements will therefore reflect a fair value gain, a fair value loss (which will contra-out) as well as dividend income.]

- 2.3 Ordinary dividend recognised when shareholder's right to receive payment is established. Interim dividend recognised on date of registration (30 September). Final dividend also recognised on date of registration (31 March) [IAS 18.30 (c)].
- 2.4 Class fees are recognised over the period of training using the percentage of completion method. [IAS 18.20 and Appendix par 16] If the expenses are incurred evenly, the percentage of completion method will result in the class fees being recognised on a straight line basis.

- 2.5 Deferred sale – sales should be recognised as revenue on delivery as follows:
- Sales price (exclusive of interest): immediately, because on the delivery date all significant risks and rewards of ownership are transferred to the buyer. (Appendix, par .8).
 - Finance costs: period of agreement in terms of the effective interest method. (Appendix, par . 8).
- 2.6 A volume rebate is not revenue, but a reduction of the cost of inventory and should be treated as such. [IAS 2.11]
- 2.7 Sale is only recognised when delivery of the item has taken place, because only then do the risks and rewards of ownership transfer to the buyer, and only then will the related costs to deliver the item be confirmed [IAS 18.14 and Appendix par 4].
- 2.8 Interest accrues on a daily basis and must therefore be allocated on a daily basis, using the effective interest method.
- 2.9 Royalties must be recognised in terms of the contract. The revenue will therefore be based on production and recognised in terms of this, regardless of the fact that it is only received every second year. [IAS 18.30(b)]

SUGGESTED SOLUTION TO QUESTION 2

Background

According to circular 9/2006 par 16, settlement discounts *granted* should be estimated at the time of sale, and presented as a reduction in revenue.

This should be done in order to measure the revenue at the fair value of the consideration received or receivable.

Similarly, according to circular 9/2006 par 17, settlement discounts *received* should be estimated at the time of purchase and deducted from the cost of inventories.

This reduction in inventory is necessary to reflect the actual cost of the inventory.

If entities did not follow this treatment in the past (as was the case in South Africa), their financial statements would not have been in line with IFRS, and consequently these financial statements need to be corrected by accounting for a prior period error.

Shorty Limited will therefore have to correct its financial statements for prior periods retrospectively, by restating comparatives (2004) and by adjusting the opening balance of retained earnings for the earliest period presented (2004). In addition, an additional statement of financial position should be presented as at the beginning of 2004.

Discount granted

The discount of R35 000 granted during 2004 relates to sales during 2003 and should have been accounted for as a reduction in revenue and debtors in 2003. This adjustment should now be done retrospectively by reducing the opening balance of retained earnings at the beginning of 2004 with R35 000. Other expenses for 2004 should also be reduced with R35 000.

The discount of R102 000 granted during 2004 should have been accounted for as a reduction in revenue and not as other expenses. These two line items therefore need to be restated in the statement of profit or loss and other comprehensive income for 2004 (reduce revenue with R102 000 and reduce other expenses with R102 000).

Similarly, the discount of R94 000 granted during 2005 should be accounted for as a reduction in revenue and not as other expenses.

An estimate should be made of the discounts that will be granted in 2006 relating to debtors' balances at the end of 2005. This amount should then be accounted for as a reduction in revenue for 2005 and a reduction in the debtors' balance at the end of 2005. The amount of the adjustment will be R93 000 ($6\,200\,000 \times 30\% \times 5\%$).

Discount received

The discount received of R58 000 during 2005 should not be accounted for as other income, but should instead be accounted for as a reduction in cost of sales and inventory. The adjustment to cost of sales will amount to R46 400 (80% - in respect of the inventory already sold), and the adjustment to inventory will amount to R11 600 (20% in respect of the inventory still on hand).

An estimate should be made of the discounts that will be received in 2006 relating to creditors' balances at the end of 2005. 75% of this amount should then be accounted for as a reduction in the cost of inventory at the end of 2005 ($3\,900\,000 \times 80\% \times 2\% \times 75\% = 46\,800$), while the remainder (25%) should be accounted for as a reduction in the cost of sales for 2005 ($3\,900\,000 \times 80\% \times 2\% \times 25\% = R15\,600$).

Both these amounts (a total of R62 400) will reduce the creditors' balance at the end of 2005.

SUGGESTED SOLUTION TO QUESTION 3

Commission falls within the definition of revenue for an estate agent as it is earned in the normal course of business. This revenue arises from the rendering of services, and therefore it is necessary to determine whether the outcome of the transaction can be estimated reliably - if so, revenue associated with the transaction shall be recognised by reference to the stage of completion of the transaction at the reporting date. If the outcome cannot be estimated reliably, revenue should be recognised only to the extent of the expenses recognised that are recoverable.

Until the sale agreement has been signed by both buyer and seller, the outcome of the rendering of services (commission to be received) cannot be estimated reliably, as there is no certainty that the sale transaction will realise. As a result, before signing the sale agreement, revenue may only be recognised to the extent of the expenses recognised that are recoverable. There is however no certainty at that stage that any of the expenses incurred will be recoverable, and therefore no revenue may be recognised before the sale agreement has been signed by both parties.

Once the sale agreement has been signed there is more certainty regarding the transaction and as a result, it is necessary to determine whether the outcome of the transaction can be estimated reliably, by taking into account the following criteria:

1. Whether the amount of revenue can be measured reliably.

The first criterion is satisfied once the sale agreement has been signed by both buyer and seller, as the commission amount would be stipulated in the agreement.

2. Whether it is probable that the economic benefits associated with the transaction will flow to the entity.

The probability criteria will only be satisfied once the agreement has been signed and all the suspensive conditions stated therein are satisfied (e.g. subject to the sale of other houses, granting of bonds by the bank etc).

3. Whether the stage of completion of the transaction at the reporting date can be measured reliably.

Taking into account the prior two criteria, the stage of completion of the contract can only be considered once the contract has been signed and the suspensive conditions are satisfied. At that state the contract is effectively completed (majority of the services rendered) and the stage of completion of the transaction (100% completed) can be measured reliably.

4. Whether the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

The costs incurred by the agent would relate largely to travel and/or advertising. Once the suspensive conditions are satisfied, the majority of the costs have already been incurred and any future costs are likely to be negligible/measurable.

Conclusion: Once all the suspensive conditions in the agreement have been met, the commission shall be recognised as revenue. (It is also at this stage that the agent becomes legally entitled to the commission. If the agreement is cancelled subsequently, the seller will still be liable for the payment of commission to the estate agent.) If the commission becomes irrecoverable, an expense should be recognised for the amount that will not be recovered rather than a deduction in the recognised revenue.

SUGGESTED SOLUTION TO QUESTION 4

E-mail 1

MEMORANDUM

To: Accountant: LAN Limited
From: IAS Inc audit partner
Date: February 2006
RE: Refund policy

Message:

Dear accountant

I refer your email regarding the policy of refunds granted by LAN Limited to dissatisfied customers. In our opinion the following should be considered to determine the appropriate accounting treatment.

The sale of clothing items gives rise to the generation of revenue. However, as customers have the right to return the goods, the question arises at which stage the revenue from the sale of the clothing items may be recognised. According to IAS 18.14 revenue from the sale of goods may be recognised when:

- the significant risks and rewards of ownership have been transferred to the buyer;
- the entity retains neither continuing managerial involvement nor effective control;
- the amount of revenue can be measured reliably;
- it is probable that economic benefits will flow to the entity; and
- the costs in respect of the transaction can be measured reliably.

Due to the absence of information to the contrary, it may be assumed that the cost of the clothing items as well as the revenue (selling price) can be measured reliably.

It is probable that economic benefits will flow to LAN Limited, as only 13% of the products sold, are returned.

The fact that customers have the right to return goods, may give the impression that LAN Limited retains some of the risks attributable to ownership. The risks being retained are however insignificant and, as a result, the revenue from the sale of the clothing items should be recognised on the date of sale, provided a provision can be raised for possible returns.

A provision is a liability of uncertain timing or amount.

A liability is:

- a present obligation;
- as a result of a past event;
- the settlement of which is expected to result in an outflow of economic

benefits from the entity.

A liability is recognised if:

- it is probable that future economic benefits will flow from the entity; and
- the item has a cost that can be measured reliably.

LAN Limited has a policy of refunding the purchases of dissatisfied customers. This policy is generally known to the customers.

As a result, an expectation is raised by LAN Limited on the date of the sale, and therefore refunding of purchases can not be avoided. LAN Limited therefore has a constructive obligation from the date of sale.

The past event is the sale of items to the customers by LAN Limited.

When the items are returned, and the customers are refunded in cash, their will be an outflow of economic benefits.

History/experience has shown that approximately 13% of all items sold will be returned. Therefore it is probable that certain customers will return their items and thus a reliable estimate of the provision can be made.

Thus a liability exists.

There is uncertainty regarding which of the customers and when they will return their items.

Thus, a provision for the estimated costs should be recognised in the books of LAN Limited.

The provision will be measured at the sales for the last two months before year-end multiplied with 13%.

Yours sincerely
IAS Inc partner

E-mail 2

IAS 18.13 - *Revenue* requires that the recognition criteria in respect of revenue should be applied separately to each transaction. In certain circumstances, it is however necessary to apply the recognition criteria to the separately identifiable components of a single transaction in order to reflect the substance of the transaction.

Revenue must therefore be accounted for separately for each of the following:

- The sale of goods;
- The rendering of services; and
- Finance income.

Revenue is measured at the fair value of the consideration received.

Where an entity provides interest free credit to the buyer and the arrangement effectively constitutes a financing transaction, the fair value of the consideration is determined by discounting all future receipts using:

- (a) the rate of a similar instrument of an issuer with a similar credit rating; or
- (b) a rate that discounts the nominal amount of the instrument to the current cash sales price of the goods or services.

The difference between the fair value and the nominal amount of the consideration is recognised as interest revenue.

The total present value of the cash flows must be split between revenue from the mere sale of the appliance and revenue from the delivering of the maintenance services.

The total present value of the cash flows should be reduced with the present value of the amount deferred for the maintenance services. The deferred amount is that which will cover the expected costs of the services under the agreement, together with a reasonable profit on those services.

Revenue from the sale of goods will be recognised on the date on which the significant risks and rewards of ownership pass from the seller to the buyer (probably when the customer leaves the retail outlet with the electrical appliance).

Revenue from maintenance services (this is a service other than installation) will be recognised when the maintenance services are rendered (i.e. one year after the sale of the goods).

Finance income will be recognised on a time proportion basis calculated using the effective interest method.

SUGGESTED SOLUTION TO QUESTION 5

The transaction consists of 4 different items, namely:

- a) The sale and development of the computer system.
- b) The home page designed
- c) The maintenance fees
- d) The loan from SBI Investments.

Sale and development of system

In terms of IAS 18.14, income from the sale of goods may be recognised when all the following conditions are met:

- The entity has transferred to the buyer the significant risk and rewards of ownership of the goods;
- The entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- The amount of revenue can be measured reliably;
- It is probable that the economic benefits associated with the transaction will flow to the entity; and
- The cost incurred or to be incurred in respect of the transaction can be measured reliably.

The computer system was ordered and has been installed and made operational for SBI Investment house. In addition, SBI Investments is now responsible for the maintenance of the system. A purchase agreement has been entered into by both parties with the method of payment set out.

The above items all indicate that risk and rewards of the system have passed and that the company has satisfactorily performed its obligations in terms of the contract by 30 September 2005.

Collectibility of the purchase price is reasonably assured. The sale has been made to SBI Investment house and it is unlikely that SBI Investment house would default on payment. (SBI Investment house is highly profitable).

The purchase agreement also stipulates when payment is due from SBI Investment house.

Cost and revenue related to the contract should be measurable in order for the profit on the contract to be ascertained reliably.

Cost:

The costs have been ascertained to be R5 000 000. However, Connection Incredible had to borrow money in order to finance this project.

Revenue:

The revenue of R8 000 000 is collectible in equal annual instalments over 2 years. The pattern of payment per the sale agreement is similar to a hire purchase agreement and, therefore, these payments should rather be present valued in order to determine the "true" sales price. The discount rate would be 18%.

The true sales price is R6 262 568 (PMT = 4 000 000; i = 18%; n = 2). Interest will be accrued on a day-by-day basis. Therefore, at year end interest receivable will amount to R281 816 (6 262 568 x 18% x 3/12). Thus Connection Incredible will recognise finance income of R281 816.

The amount receivable from SBI Investments will need to be discounted and will be disclosed as a long term receivable (being R3 389 831) and a short term receivable (being R3 154 553), which will include interest receivable of R281 816.

Home page designed

This is a service contract, the outcome of which cannot be reliably estimated, as cost still to be incurred is not known.

All costs incurred are recoverable ("they are always less than R100 000").

Revenue equal to the recoverable cost incurred should be recognised (no profit will be recognised). The rendering of service will result in income of R28 000 being recognised and a corresponding expense of R28 000 (as part of cost of sales).

Maintenance fees

The fees with regard to the maintenance services can be recognised as revenue. The service has been completed.

Loan from SBI Investment house

The loan received should not be netted off against the amount receivable. The loan of R3 million is a separate liability and is not part payment of the purchase price as far as SBI Investment house is concerned.

SBI Investment house, therefore, acts in the capacity of a creditor in respect of the R3 000 000 loan.

This loan should be disclosed separately as a current liability. The current liability with regard to the loan will be R3 000 000 and interest accrued will be R225 000. (The interest accrued will affect the statement of profit or loss and other comprehensive income by recognising R225 000 as a finance charge).

SUGGESTED SOLUTION TO QUESTION 6

1. Ticket proceeds

1.1 Accounting treatment

- The proceeds from **ticket sales** may not be recognised as revenue until the performance (service that is provided) has occurred. This is due to two of the requirements in IAS 18.20 for the recognition of revenue from the rendering of services, i.e.:
 - It should be probable that economic benefits of the transaction will flow to the entity [IAS 18.20(b)] -- the show may be cancelled or may not run for whatever reason and the ticket proceeds may be returned.
 - The expenses related to the transaction which are to be incurred can be measured reliably [IAS 18.20(d)] -- the show will only run in August 1999 and therefore all the costs to be incurred cannot be measured reliably.
 - In addition, the Appendix to IAS 18 states that revenue from artistic performances is recognised when the event takes place – since the show will only open in August 1999, it has not as yet, taken place.
- The **interest earned** may be recognised as revenue on a time proportion basis, using the effective interest method. However, if the agreement allows for the refunding of the interest should the show not proceed, management should consider the probability of this event happening. If the probability is remote, the interest should still be recognised as revenue. On the other hand, if the probability is not remote, the interest received should be accounted for as a liability until the show runs.
- The **pre-production costs** should be deferred until the time the show runs and then matched with the related revenue. It is regarded as direct costs of providing the service which should be recognised proportionally over the period that the show will run.
- Advertising costs** should be recognised as an expense in the period when the adverts are made (costs incurred) -- refer to IAS 38.69. Some could argue that these costs should be deferred and matched with revenue from ticket sales, but this matching would be arbitrary and it would be impossible to determine how effective the adverts really were in generating ticket sales.

2.2 Disclosure

- Include the amount for **advance ticket sales** under current liabilities and show as a separate line item only if the amount is material.
- Interest received** should be included in other income in the statement of profit or loss and other comprehensive income.
- Deferred pre-production costs** are included under current assets.
- Advertising costs** are normally not shown as a separate line item in the statement of profit or loss and other comprehensive income, but are included under other expenses.

SUGGESTED SOLUTION TO QUESTION 7

PART A

- a) Calculate the revenue arising from transactions 1-3
- | | |
|--|------------|
| a. 120 Carcomps x \$550 x 9,60* - sales | R 633 600 |
| 150 Carcomps – 14 days have not yet expired by 30 June . | - |
| * 29 June the date the 14 days expired | |
| b. 440 x 4 125 x 85% - Sales | R1 542 750 |
| 2 x 4 125 x 15% - service fee | R 1 238 |
| c. No transfer of risks and rewards have taken place | - |
| | |
| TOTAL SALES | R2 177 588 |
- b) Disclosure of closing inventory as at 30 June 20X2
10. Inventories
- | | |
|---------------------|--------------------|
| Raw materials | R750 000 |
| Finished goods [C1] | <u>R1 634 400</u> |
| | <u>R 2 384 400</u> |
- Calculations**
- C1 Inventory**
- | | |
|---|-------------------|
| Inventories in warehouse (given) | R950 400 |
| Carcomps on consignment in USA | |
| - Not sold [(350 shipped -270 sold) x 4 125 x 100/125] | R264 000 |
| - Sold but 14 days not yet expired | |
| - (150 x 4 125 x 100/125] | R495 000 |
| Net realisable value adjustment resulting from fixed-price selling contract [150 x (4 125 x 100/125 – 2 800)] | <u>R(75 000)</u> |
| | <u>R1 634 400</u> |

SUGGESTED SOLUTION TO QUESTION 8**PART A**

The air miles awarded should be accounted for as a separately identifiable component of the transaction in which the original air ticket is purchased. As a result, the total fair value of the consideration received upon the initial sale should be allocated between the air miles awarded and the sale of the original air ticket. The amount allocated to the air miles should then be deferred until the air miles are redeemed and the airline fulfils its obligation to supply the free flight. The amount of revenue recognised when the free flight is supplied, should be based on the number of air miles redeemed relative to the total number expected to be redeemed.

PART B

<i>1 January 20X7:</i>	R
Amount received in cash	4 500
Amount deferred (45 points* x R12)	(540)
Revenue recognised	<u>3 960</u>
* 4 500 / 100	

<i>1 February 20X7:</i>	
Amount received in cash [2 500 – (20 x 15)]	2 200
Amount deferred (22 points* x R13,50)	(297)
Points redeemed $[(20 / (45 \times 90\%)) \times 540]$	<u>267</u>
Revenue recognised	<u>2 170</u>
* 2 200 / 100	

<i>1 March 20X7:</i>	
Amount received in cash [3 000 – (20 x 15)]	2 700
Amount deferred (27 points* x R14,25)	(385)
Cumulative points redeemed $[(20 + 20) / ((45 + 22) \times 95\%)] \times (540 + 297)$	526
Points recognised on 1 February 20X7	<u>(267)</u>
Revenue recognised	<u>2 574</u>
* 2 700 / 100	

PART C

- Although the clothing shop operates the customer loyalty program, the awards (airline tickets) are supplied by a third party, namely Skyfly Airline. The clothing shop collects the consideration for the awards on its own account and, in respect of points redeemed, compensates the airline for supplying the free airline tickets. As this is not a principal / agent relationship, the clothing shop should defer the revenue relating to the points awarded until the points are redeemed at the airline, at which date both the revenue and related cost should be recognised.

10 000 points were awarded by the clothing shop during the 20X7 financial year, resulting in revenue of R50 000 (10 000 points x R5) being deferred. Of this R50 000, an amount of R31 579 should be recognised as revenue in 20X7, as

6 000 points were redeemed before year-end. The amount recognised is calculated with reference to the points redeemed relative to the total number of points expected to be redeemed, ie $[6\ 000 / (10\ 000 \times 95\%)] \times 50\ 000 = 31\ 579$. In respect of the points redeemed, an expense of R27 000 (6 000 x 4,50) should be recognised when the points are redeemed, representing the amount payable to Skyfly Airline.

- From the terms of the agreement it is clear that the clothing shop collects the consideration for the points on behalf of the airline. The clothing shop therefore acts as an agent for the airline. As a result, the revenue recognised by the clothing shop should be measured as the net amount retained on its own account, ie the difference between the consideration allocated to the points (R5) and the amount payable to the airline (R4,50). This revenue should be recognised at the date when the points are awarded, as the clothing shop has no further obligation from this date onwards regarding the points that have been awarded. At this date the airline becomes obliged to supply the awards and also becomes entitled to receive consideration for doing so. The clothing shop will therefore recognise revenue (commission) of R5 000 $[10\ 000 \times (5 - 4,50)]$ for the 20X7 financial year.

PART D

An onerous contract is a contract in which the unavoidable costs of meeting the obligation under the contract exceed the economic benefits to be received under it. At the date when the free air miles were awarded, the contract was not onerous, as the total revenue relating to the air miles amounted to R10 000 000 (1 000 000 x R10), while the expected costs amounted to R8 400 000 (1 000 000 x 70% x R12). The benefits therefore exceeded the total costs.

The 600 000 air miles that were redeemed during 20X5 resulted in revenue of R6 666 667 being recognised, namely $[600\ 000 / (90\% \times 1\ 000\ 000)] \times 10\ 000\ 000$. The remaining balance on the deferred revenue account therefore amounted to R3 333 333 at 31 December 20X5. At this date the costs to supply the remaining 300 000* air miles are expected to be R3 600 000 (300 000 x 12). As the costs of R3 600 000 exceed the future benefits of R3 333 333, an onerous contract exists. A provision therefore has to be raised at 31 December 20X5 for the excess costs of R266 667 (3 600 000 – 3 333 333).

$$* (10\ 000\ 000 \times 90\%) - 600\ 000 = 300\ 000$$