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# IAS® Standard 2 Inventories



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## CASE STUDY – IAS 2 INVENTORIES

### Introduction

The main goal of each entity is to maximize the profits from its activities, and inventories are usually used to achieve this goal. They usually make up most of the company's current assets and may include goods for resale, raw materials or consumables, finished products or work in progress, as well as various acquisitions that will be used in the production process.

To ensure the accuracy and reliability of the information presented in the financial statements, entities must select and apply inventory accounting policies that provide a true and fair representation of their financial position, results and cash flows. Any choice of inventory accounting policies and formulas must be based on the need for the entity to employ appropriate accounting policies and financial statements that introduce a fair, objective and accurate image of its financial position as well as the results of operations to external and internal users of information.

The aim of this case study is to provide understanding on these essential requirements for the rules regulating the inventories. It also establishes formulas for the determination of the cost of inventories and its subsequent recognition as an expense, as well as presents the cost formulas that are used to assign costs to inventories.

### The Case Information

The company "Happy Dog" sells specialized healthy food for dogs and uniquely designed bowls for dog food. The company uses the FIFO formula to calculate the cost of dog food (product A) and the weighted average cost for bowls (product B), because, according to IAS 2, different cost formulas may be applied for inventories with different nature or use.

The following inventory transactions occurred during the period:

Date	Transactions
1 December 20X0	Purchase: product A – 10 units of CU50; product B – 15 units of CU20; Transportation costs for both product – CU50.
2 December 20X0	Sales: product A – 5 units of CU65; product B – 6 units of CU30.
10 December 20X0	Purchase: product A – 8 units of CU55; product B – 10 units of CU23.
15 December 20X0	Sales: product A – 11 units of CU65; product B – 16 units of CU30.
31 December 20X0	Estimated net realizable value: product A – unit CU50; product B – unit CU30

### **Discussion Questions**

1. Calculate and explain the purchase cost of inventories;
2. Calculate and explain the cost of sales and prepare the inventories cards for both products (A and B);
3. Determine and explain the value at which the inventories will be shown in the statement of the financial positions;
4. Present the entry record which will be made for all transactions of case study.

## SOLUTION OF CASE STUDY – IAS 2 INVENTORIES

### Question No. 1

When explaining the purchase cost of inventories, we need to have in mind that in IAS 2 Inventories, it is stated that the cost of inventories consists of purchase price, import duties and other taxes, as well as transportation, insurance and other costs directly attributable to the acquisition of inventories.

It might be needed to calculate the purchase cost of products for each purchase if needed. We have two purchases in case study – on 1<sup>st</sup> December and 10<sup>th</sup> December 20x0.

Product A and product B were purchased on 1<sup>st</sup> December 20X0. Transportation costs (CU50) increase the cost of products, and since these costs are common to several types of goods (A and B), they need to be allocated.

Purchase on December 1

Goods	Units	Price, CU	Total, CU	Proportion of goods value, %	Allocation of transportation, CU	Total costs of goods, CU	Costs per unit, CU
A	10	50.00	500.00	62.50% (500/800x100%)	31.25 (50.00x62.50%)	531.25 (500.00+31.25)	53.13 (531.25/10)
B	15	20.00	300.00	37.50% (300/800x100%)	18.75 (50.00x37.50%)	318.75 (300.00+18.75)	21.25 (318.75/15)
<b>Total:</b>			800.00	100%	50.00	850.00	-

After the purchase of 10<sup>th</sup> of December 20X0, there is no need to calculate the purchase cost, as there were no other costs directly attributable to the acquisition of inventories and purchase cost is equal to purchase price.

### Question No. 2

If we want to identify the costs of sales, first, we have to know the following key points from the IAS 2 Inventories:

- ✓ When using the FIFO formula, it is assumed that the inventory that is produced or acquired first will be the first to be retired;
- ✓ When applying the weighted average approach, the cost of each item is determined from the weighted average of the cost of similar items at the beginning of a period and the cost of similar items purchased or produced during the period.

Secondly, we have to follow the accounting policy of company A, which has chosen to use FIFO formula for product A and weighted average formula for product B. Then we have to fill the inventories cards taking into account these costs formulas.

After calculating the purchase cost of each product, it is possible to fill in the inventories cards for each product, and they will represent the cost of sales and the balance at the end.

### Card of goods A

Date	Record	Receipt of inventories			Write-off of inventories			Balance at end		
		Units	Costs, CU/unit	Total Costs, CU	Units	Costs, CU/unit	Total Costs, CU	Units	Costs, CU/unit	Total Costs, CU
1/12/20X0	Purchase	10	53.13	531.3				10	53.13	531.3
2/12/20X0	Sales				5	53.13	265.65	5	53.13	265.65
10/12/20X0	Purchase	8	55	440				5	53.13	265.65
								8	55	440
15/12/20X0	Sales				5	53.13	265.65			
					6	55	330	2	55	110

It can be seen that the purchase of goods A consists of two purchases (on the 1<sup>st</sup> of December and the 10<sup>th</sup> of December); therefore, when writing off the goods for sale, the earliest goods (of the 1<sup>st</sup> of December) are written off first, and then the amount needed from the newer purchase (of the 10<sup>th</sup> of December).

Therefore, in sales case on the 2<sup>nd</sup> of December, the costs of sales is CU265.65 and on the 15<sup>th</sup> of December – CU595.65 (265.65+330) from two different purchases.

### Card of goods B

Date	Record	Receipt of inventories			Write-off of inventories			Balance at end		
		Units	Costs, CU/unit	Total Costs, CU	Units	Costs, CU/unit	Total Costs, CU	Units	Costs, CU/unit	Total Costs, CU
1/12/20X0	Purchase	15	21.25	318.75				15	21.25	318.75
2/12/20X0	Sales				6	21.25	127.5	9	21.25	191.25
10/12/20X0	Purchase	10	23.00	230.00				19	22.17	421.25
15/12/20X0	Sales				16	22.17	354.74	3	22.17	66.51

It can be seen that in the case of goods B, after the second purchase on the 10<sup>th</sup> of December, we recalculated the unit cost using the following formula:  $(9 \times 21.25 \text{ balance at end} + 10 \times 23.00 \text{ second purchase}) / 19 = \text{CU}22.17$ .

The cost of sales on the 2<sup>nd</sup> of December is CU127.50 which calculated by purchase costs of 1<sup>st</sup> December, but the costs of sales on 15<sup>th</sup> December is CU354.74 which was calculated using the average cost CU22.17 per unit in product B case.

The total cost of products (A and B) sold on 2<sup>st</sup> December 20X0 is CU393.15 (265.65+127.5) and on 15<sup>th</sup> December 20X0, it is CU950.39 (265.65+330.00+354.74).

### Question No. 3

According to IAS 2 Inventories, inventories presented at the lower cost and net realisable value in statement of financial position.

Inventories (products A and B) are different, so we must evaluate each one individually, depending on which costs is lower. According to the measurement made by the company, net realisable value has been identified and it was compared with the costs of purchase.

#### Measurement of inventories

Inventory	Costs of purchase, CU	Net realisable value, CU	Lowest value, CU
A	110.00 (2x50.00)	100 (2x50.00)	100.00 (Net realisable value)
B	66.51 (3x22.17)	90 (3x30.00)	66.51 (Costs of purchase)

The minimum cost for product A is its net realisable value – CU100, for product B – the costs of the purchase – CU66.51.

Therefore, to show the net realisable value of product A in the statement of financial position, it is necessary to make record for a devaluation of inventories value at CU10 (110-100).

#### Question No. 4

Once the purchase price has been calculated and the inventories cards have been completed, the appropriate entries records can be made in the accounts.

Date	Transactions	Record
1 December 20X0	Purchase: product A – 10 units of CU50; product B – 15 units of CU20; Transportation costs for both product - CU50.	Dr. Inventories                      CU850.00 Cr. Cash                                      CU850.00 <i>(10x50.00+15x20.00+50.00)</i>
2 December 20X0	Sales: product A – 5 units of CU65; product B – 6 units of CU30.	Dr. Receivables                      CU505.00 Cr. Revenue                                      CU505.00 <i>(5x65.00+6x30.00)</i>  Dr. Costs of Sales (Expenses) CU393.15 Cr. Inventories                                      CU393.15 <i>(265.65+127.50)</i>
10 December 20X0	Purchase: product A – 8 units of CU55; product B – 10 units of CU23.	Dr. Inventories                      CU670.00 Cr. Cash                                      CU670.00 <i>(8x55.00+10x32.00)</i>
15 December 20X0	Sales: product A – 11 units of CU65; product B – 16 units of CU30.	Dr. Receivables                      CU1195.00 Cr. Revenue                                      CU1195.00 <i>(11x65.00+16x30.00)</i>  Dr. Costs of Sales (Expenses) CU950.39 Cr. Inventories                                      CU950.39 <i>(265.65+330.00+354.74)</i>
31 December 20X0	Estimated net realisable value: product A – unit CU50; product B – unit CU30	Dr. Expenses                                      CU10.00 Cr. Write-down of inventories              CU10.00 <i>(Product A 110.00-100.00)</i>

The value of inventories presented in the statement of financial position is CU166.51 (Product A CU100.00 + Product B CU66.51).