

### Task IM-10.31: Cash Flow Statement, Reconciliation Method (Kapitalflussrechnung, Überleitungsrechnung)

MARKELO Ltd. is a pizza delivery service in Dresden. The company bakes pizza on demand and delivers them to the customers by its 2 own delivery-Fiat500s. The company is registered for VAT reduction. On 31.12.20X5, MARKELO Ltd. discloses the figures on the balance sheet as below:

<b>MARKELO Ltd.'s</b> <b>STATEMENT of FINANCIAL POSITION</b> <b>as at 31.12.20X5</b>			
A			C, L
<i>Non-current assets</i>	[EUR]	<i>Equity</i>	[EUR]
P, P, E	7,500.00	Share capital	50,000.00
Intangibles		Reserves	
Financial assets		Retained earnings	70,000.00
<i>Current assets</i>		<i>Liabilities</i>	
Inventory	13,000.00	Interest bear liab	
Accounts receivables		Accounts payables	
Prepaid expenses	2,000.00	Provisions	
Cash/Bank	127,500.00	Tax liabilities	30,000.00
<b>Total assets</b>	<b>150,000.00</b>	<b>Total equity and liab.</b>	<b>150,000.00</b>

**Exhibit 1:** Balance sheet

The FIAT500s are from 1.07.20X2. The cost of acquisition were 30,000.00 EUR/car. Depreciation is along straight line method over 4 years. No residual value is to be considered.

During the Accounting period 20X6, MARKELO Ltd. pays the income taxes from last year.

In the middle of the year the both cars are sold to a car dealership at 800.00 EUR each. The amounts are the net selling prices.

On 3.07.20X6, MARKELO Ltd. buys 3 new FIAT500s at 34,500.00 EUR (net amount) each. The cars are financed by a bank loan of 50,000.00 EUR, the remaining amount is paid by bank transfer. The bank loan is secured by the cars and comes with 12,500.00 EUR pay-off and 3 % interest to be paid at every yearend. MARKELO Ltd. delivers 54,000 pizza during 20X6 and receives 10.00 EUR/pizza on cash from its customers.

During the Accounting period 20X6, MARKELO Ltd. purchases for 200,000.00 EUR ingredients (= purchase costs). 10 % of the ingredients (opening stock plus purchase) get rotten and will be put to trash. 80 % of the available amount of ingredients will be used by baking pizza. MARKELO Ltd. pays for its purchases to an extent of 75 % in 20X6, the remaining amount one year later: in 20X7.

The rent for the pizza bakery (no restaurant) is 2,000.00 EUR/month and is paid one month in advance. Rent will increase by 300.00 EUR/a in 20X7. No VAT is to be considered for the rent.

Labour is 90,000.00 EUR/a and will be paid instantly.

**Required: Prepare a statement of cash flows. You do not have to discount liabilities nor do you have to disclose short term liabilities separate to long-term liabilities.**

MARKELO Ltd. ist ein Pizza-Bring-Dienst in Dresden. Das Unternehmen backt Pizza auf Anfrage und liefert es an seine Kunden mit seinen 2 FIAT500 Auslieferungsfahrzeugen. Das Unternehmen ist vorsteuerabzugsberechtigt. MARKELO Ltd. zeigt die Zahlen in der Bilanz nach IAS 1 zum 31.12.20X5:

<b>MARKELO Ltd.'s</b> <b>STATEMENT of FINANCIAL POSITION</b> <b>as at 31.12.20X5</b>			
A			C, L
<i>Non-current assets</i>	[EUR]	<i>Equity</i>	[EUR]
Anlagevermögen	7,500.00	gez. Kapital	50,000.00
		Rücklagen	
		JÜ/BG	70,000.00
<i>Current assets</i>		<i>Liabilities</i>	
Vorräte	13,000.00	Zinspfl. Schulden	
Forderungen		Verbindlichkeiten	
Vorauszahlungen	2,000.00	Rückstellungen	
Kasse/Bank	127,500.00	Steuerschulden	30,000.00
<b>Total assets</b>	<b>150,000.00</b>	<b>Total equity and liab.</b>	<b>150,000.00</b>

**Exhibit 1:** Bilanz

Die FIAT500 sind am 1.07.20X2 angeschafft worden. Die Anschaffungskosten betrugen 30.000,00 EUR/Auto. Die Abschreibung ist nach linearer Abschreibungsmethode über 4 Jahre ohne Restbuchwert. Während der Abschreibungsperiode 20X6, zahlt MARKELO Ltd. die Unternehmenssteuern aus dem letzten Jahr.

Am 30.06.20X6 werden beide Autos an einen Autohändler zu jeweils 800.00 EUR verkauft. Die Werte sind die Netto-Verkaufserlöse.

Am 3.07.20X6 kauft die MARKELO Ltd. 3 neue FIAT500 zu jeweils 34.500,00 EUR (netto). Die Autos werden durch ein Bankdarlehn von 50.000,00 EUR finanziert, der Restbetrag wird per Überweisung bezahlt. Das Bankdarlehen ist durch die Autos gesichert und hat eine jährliche Tilgungsrate von 12.500,00 EUR und einen Jahreszinssatz von 3 %, die (beide) zum Jahresende fällig sind.

Die MARKELO Ltd. liefert während der Abrechnungsperiode 20X6 54.000 Pizzen aus und erhält 10,00 EUR/Pizza bar von ihren Kunden.

Während der Abrechnungsperiode 20X6, kauft die MARKELO Ltd. für 200.000,00 EUR Zutaten (= Anschaffungskosten). 10 % der Zutaten (bezogen auf den Anfangswert und die Einkäufe) verderben und werden entsorgt. 80 % der verfügbaren Zutaten werden für das Backen von Pizzen verbraucht. Die MARKELO Ltd. zahlt für ihre Einkäufe zu einem Anteil von 75 % in 20X6, für den Rest ein Jahr später: in 20X7.

Die Miete für die Pizzabäckerei (kein Restaurantbetrieb) beträgt 2.000,00 EUR/Monat und wird einen Monat im Voraus gezahlt. Die Miete wird um 300,00 EUR/m in 20X7 erhöht. Für Miete ist keine Umsatzsteuer relevant.

Die Löhne betragen 90.000,00 EUR/a und werden sofort bezahlt.

Gefragt: Erstellen Sie eine Kapitalflussrechnung. Sie brauchen Schulden nicht zu diskontieren oder separat auszuweisen.

### Solution:

The calculation of the profit can be done straight:

- profit on disposal:  $2 \times 800 = \mathbf{1,600.00 \text{ EUR}}$ , both cars are written-off at that time
- material expenses:  $(13,000 + 200,000) \times 90\% = \mathbf{191,700.00 \text{ EUR}}$ .
- rent:  $2,000 \times 12 = \mathbf{24,000.00 \text{ EUR}}$ .
- labour:  $90,000.00 \text{ EUR}$
- revenue:  $10 \times 54,000 / 120\% = \mathbf{450,000.00 \text{ EUR}}$ .
- depreciation:  $2 \times 30,000 / (4 \times 2) + 3 \times (34,500 / (120\% \times 4 \times 2)) = 7,500 + 12,937.50 = \mathbf{20,437.50 \text{ EUR}}$ .
- interest:  $50,000 \times 3\% / 2 = \mathbf{750.00 \text{ EUR}}$ .

The changes in the working capital are as follows:

- A/R: nothing, but prepaid expenses will be 2,300 as at 31.12.20X6. Hence there is an increase of prepaid expenses to the extent of  $2,300 - 2,000 = \mathbf{300.00 \text{ EUR}}$ .
- changes in inventories are:  $(13,000 + 200,000) \times 10\% - 13,000 = \mathbf{8,300.00 \text{ EUR}}$  as an increase.
- A/P:  $200,000 \times 120\% \times (1 - 75\%) = \mathbf{60,000.00 \text{ EUR}}$ , at the same time the tax liabilities decrease by 30,000. Hence, the total change is  $60,000 - 30,000 = \mathbf{30,000.00 \text{ EUR}}$ . as it is an increase it leads to a positive cash flow.
- VAT/r results from the purchase. The amount is  $20\% \times 200,000 = \mathbf{40,000.00 \text{ EUR}}$ .
- VAT/p results from the sale of pizza (not from the car):  $20\% \times (54,000 \times 10) / 120\% = \mathbf{90,000.00 \text{ EUR}}$ .

The investing cash flow is based on the sale and the acquisition of the cars.

- sale:  $2 \times 800 \times 120\% = \mathbf{1,920.00 \text{ EUR}}$ . As the car sale is no operating expense, the profit on disposal has to taken away from the profit in the reconciliation statement.
- acquisition:  $3 \times 34,500 \times 120\% = \mathbf{124,200.00 \text{ EUR}}$ .

The financing cash flow results from taking the bank loan and paying interest and pay-off.

- taking the bank loan:  $50,000.00 \text{ EUR}$
- interest and pay-off:  $750 + 12,500 = \mathbf{13,250.00 \text{ EUR}}$ .

D		Profit and Loss		C
Mat	191,700.00	PoD	1,600.00	
Rnt	24,000.00	Rev	450,000.00	
Lab	90,000.00			
Dpr	20,437.50			
Int	750.00			
EBT	124,712.50			
	<u>451,600.00</u>		<u>451,600.00</u>	
		b/d	124,712.50	

**Exhibit 1:** Profit and Loss account

Markelo Ltd.'s STATEMENT of CASH FLOWS for the period ended 31.12.20X6	
<i>Cash flow from operating activities</i>	
EBT	124,712.50
add Interest paid	750.00
add Depreciation	20,437.50
deduct Profit on Disposal	(1,600.00)
	<u>144,300.00</u>
<i>changes in working capital</i>	
changes in A/R	(300.00)
changes in inventory	(8,300.00)
changes in A/P	30,000.00
changes in VAT/r only materials	(40,000.00)
changes in VAT/p	90,000.00
	<u>215,700.00</u>
<i>Cash flow from investing activities</i>	
Investments	(124,200.00)
Disposal	1,920.00
	<u>(122,280.00)</u>
<i>Cash flow from financing activities</i>	
bank loan received	50,000.00
Pay-off plus interest	(13,250.00)
...	
	<u>36,750.00</u>
<b>Total cash flow</b>	<u><u>130,170.00</u></u>

**Exhibit 2:** Statement of cash flows

Bookkeeping entries (not required):

- (1) Payment of income taxes: 30,000.00 EUR
- (2) Depreciation of the old FIAT500s:  $2 \times 30,000 / (4 \times 2) = 7,500.00$  EUR.
- (R) Disposal of the FIAT500s at 800.00 EUR net selling price. (Realisation account)
- (3) Acquisition of cars:  $34,500 \times 3 = 103,500.00$  EUR.
- (4) Depreciation on the new cars:  $103,500 / (4 \times 2) = 12,937.50$  EUR.
- (5) Taking bank loan: 50,000.00 EUR
- (6) Payment of interest 750.00 EUR
- (7) Pay-off: 12,500.00 EUR.
- (8) Purchase of ingredients:  $200,000 \times 120\% = 240,000.00$  EUR.
- (9) Material consumption:  $90\% \times (13,000 + 200,000) = 191,700.00$  EUR.
- (10) Revenue recognition:  $(54,000 \times 10) / 120\% = 450,000.00$  EUR.
- (11, 12, 13) Recording rent
- (14) Payment for labour: 90,000.00 EUR

Crosscheck with the accounts.

D		P, P, E		C
OV	60,000.00	(R)	60,000.00	
(3)	103,500.00	c/d	103,500.00	
	<u>163,500.00</u>		<u>163,500.00</u>	
b/d	103,500.00			

D		Acc depr		C
		OV	52,500.00	
(R)	60,000.00	(2)	7,500.00	
	<u>60,000.00</u>		<u>60,000.00</u>	
		(4)	12,937.50	

D		Inventory		C
OV	13,000.00	(9)	191,700.00	
(8)	200,000.00	c/d	21,300.00	
	<u>213,000.00</u>		<u>213,000.00</u>	
b/d	21,300.00			

D		Prepaid expenses		C
OV	2,000.00	(11)	2,000.00	
(13)	2,300.00	c/d	2,300.00	
	<u>4,300.00</u>		<u>4,300.00</u>	
b/d	2,300.00			

D		Cash/Bank		C
OV	127,500.00	(1)	30,000.00	
(R)	1,920.00	(3)	124,200.00	
(5)	50,000.00	(6)	750.00	
(10)	540,000.00	(7)	12,500.00	
		(8)	180,000.00	
		(12)	24,300.00	
		(14)	90,000.00	
		c/d	257,670.00	
	<u>719,420.00</u>		<u>719,420.00</u>	
b/d	257,670.00			

D		Issued capital		C
c/d	50,000.00	OV	50,000.00	
		b/d	50,000.00	

D		Retained earnings R/E		C
c/d	70,000.00	OV	70,000.00	
		b/d	70,000.00	
c/d	157,298.75	R/E	87,298.75	
	<u>157,298.75</u>		<u>157,298.75</u>	
		b/d	157,298.75	

D		Income tax liabilities		C
(1)	30,000.00	OV	30,000.00	
		P&L	37,413.75	

**Exhibit 3:** Accounts (not required)

D Depreciation C	
(2) 7,500.00	
(4) <u>12,937.50</u>	c/d <u>20,437.50</u>
<u>20,437.50</u>	<u>20,437.50</u>
b/d 20,437.50	P&L 20,437.50

D Realisation C	
(R) 320.00	(R) 1,920.00
(R) 60,000.00	(R) 60,000.00
P&L <u>1,600.00</u>	
<u>61,920.00</u>	<u>61,920.00</u>

D VAT C	
(3) 20,700.00	(R) 320.00
(8) 40,000.00	(10) 90,000.00
c/d <u>29,620.00</u>	
<u>90,320.00</u>	<u>90,320.00</u>
	b/d 29,620.00

D Profit and Loss P&L C	
Dpr <u>20,437.50</u>	PoD 1,600.00
Int 750.00	Rev 450,000.00
Mat 191,700.00	
Rnt 24,000.00	
Lab 90,000.00	
EBT <u>124,712.50</u>	
<u>451,600.00</u>	<u>451,600.00</u>
ITL <u>37,413.75</u>	b/d <u>124,712.50</u>
R/E <u>87,298.75</u>	
<u>124,712.50</u>	<u>124,712.50</u>

D Interest C	
(6) <u>750.00</u>	P&L <u>750.00</u>

D Interest bearing liabilities C	
(7) 12,500.00	(5) 50,000.00
c/d <u>37,500.00</u>	
<u>50,000.00</u>	<u>50,000.00</u>
	b/d 37,500.00

D Accounts payables A/P C	
c/d <u>60,000.00</u>	(8) <u>60,000.00</u>
	b/d 60,000.00

D Material expenses C	
(9) <u>191,700.00</u>	c/d <u>191,700.00</u>
b/d 191,700.00	P&L 191,700.00

D Revenue C	
P&L 450,000.00	(10) 450,000.00

D Rent C	
(11) 2,000.00	(13) 2,300.00
(12) <u>24,300.00</u>	c/d <u>24,000.00</u>
<u>26,300.00</u>	<u>26,300.00</u>
b/d 24,000.00	P&L 24,000.00

D Labour C	
(14) <u>90,000.00</u>	P&L <u>90,000.00</u>

Exhibit 3: Accounts (continued)

**MARKELO Ltd.'s**  
**STATEMENT of FINANCIAL POSITION**  
**as at 31.12.20X5**

A			C, L
<i>Non-current assets</i>	[EUR]	<i>Equity</i>	[EUR]
P, P, E	90,562.50	Share capital	50,000.00
Intangibles		Reserves	
Financial assets		Retained earnings	157,298.75
<i>Current assets</i>		<i>Liabilities</i>	
Inventory	21,300.00	Interest bear liab	37,500.00
Accounts receivables		Accounts payables	89,620.00
Prepaid expenses	2,300.00	Provisions	
Cash/Bank	257,670.00	Tax liabilities	37,413.75
<b>Total assets</b>	<b>371,832.50</b>	<b>Total equity and liab.</b>	<b>371,832.50</b>

**Exhibit 4:** Balance sheet (not required)