

Aufgabe QR-10.8: Kapitalflussrechnung

(Cash Flow Statement)

SIEVERSHAUSEN (Pty) Ltd. stellt Smartphones her. Sie montieren die Teile und betreiben Konfiguration. SIEVERSHAUSEN hat eine Montagestraße für 120.000,00 EUR (brutto) gekauft und die Hälfte des Betrags in der Abrechnungsperiode 20X5 bezahlt. Der verbleibende Anteil ist in der nächsten Periode zu zahlen. Verwenden Sie lineare Abschreibung und schreiben Sie die Montagestraße über eine Nutzungsdauer von 5 Jahren ab. Es muss kein Restwert berücksichtigt werden.

SIEVERSHAUSEN hat Handybauteile für 42.000,00 EUR (brutto) gekauft und per Banküberweisung an den Lieferanten bezahlt. Sie haben Bauteile auf Rechnung von einem anderen Lieferanten gekauft und eingewilligt ihm in 20X6 einen Betrag von 12.000,00 EUR (brutto) zu zahlen. Berücksichtigen Sie einen Anfangswert von Bauteilen von 80.000,00 EUR. Es gibt einen Vorsteuerforderungsbetrag von 16.000,00 EUR zu Beginn der Abrechnungsperiode und eine Verbindlichkeit, die 96.000,00 EUR beträgt. Alle Beträge sind in 20X5 fällig. Während der Abrechnungsperiode 20X5 hat SIEVERSHAUSEN 10.000 Telefone hergestellt und an Warenhäusern verkauft. Sie haben die Zahlungen für den Umsatz, der 120,00 EUR/Telefon (brutto) beträgt, bereits in 20X5 per Überweisung erhalten. SIEVERSHAUSEN hat Löhne in Höhe von 310.000,00 EUR gezahlt und an eine Unternehmensberatung 240.000,00 EUR (einschließlich Vorsteuer) für eine Werbekampagne bezahlt. Wegen Qualitätsproblemen wurden 300 Telefone von den Kunden zurückgeschickt. Diese haben eine Gutschrift erhalten, die noch nicht eingelöst wurde. Bei Eingang wurden diese Telefone nicht geprüft und daher zu Herstellungskosten auf das Lager gelegt. Später wurden sie überprüft und weggeschmissen. Es gibt keinen Endbestand an Vorräten am Ende von 20X5.

Das Finanzamt verlangt die Zahlung von 90% der gesamten Unternehmenssteuern in der Abrechnungsperiode 20X5 als Vorauszahlung.

Gefragt: (a) Bestimmen Sie den Nachsteuergewinn und den Cash Flow für die Abrechnungsperiode 20X5. Beachten Sie, dass die Umsatzsteuerschuld/Vorsteuerforderung sowie die Gesamtunternehmenssteuern in der nächsten Abrechnungsperiode fällig sind. (Beachten Sie jedoch die Vorauszahlungsregel) Nehmen Sie an, das Unternehmen wäre im Dezember 20X4 mit folgendem Buchungssatz gegründet worden:

| | |
|----------------------------------|------------------------|
| DR Bank | 250.000,00 EUR |
| CR Capital Reserves | 50.000,00 EUR |
| CR Issued Capital | 200.000,00 EUR. |

(b) Erstellen Sie eine Bilanz zu Beginn und zum Ende der Abrechnungsperiode 20X5 und bestimmen Sie den Kapitalfluss nach IAS 7 über die derivative Methode. Unterscheiden Sie den operativen, den finanziellen und den investiven Kapitalfluss.

English Version:

SIEVERSHAUSEN (Pty) Ltd. produces smart phones. They assemble parts and run a configuration process. SIEVERSHAUSEN bought a new assembling line 120,000.00 EUR (gross amount) and paid half of the amount in the accounting period 20X5. The remaining portion is to be paid during the next period. Use straight line method for depreciation and write the assembling line off over a useful life of 5 years. There is no residual value to be considered.

SIEVERSHAUSEN bought phone parts and paid 42,000.00 EUR (gross amount) to the supplier per bank transfer. They bought parts on credit from another supplier and agreed to pay 12,000.00 EUR (gross amount) to him in 20X6. Consider an opening value for parts to be 80,000.00 EUR. There is an amount for VAT receivable 16,000 EUR at the beginning of the accounting period and A/P amounts to 96,000.00 EUR. All amounts due are paid in 20X5. During the accounting period 20X5 SIEVERSHAUSEN produced 10,000 phones and sold them to department stores. They received the payments for revenue which is 120.00 EUR/p (gross amount) per bank transfer in 20X5 already. SIEVERSHAUSEN paid salaries 310,000.00 EUR and paid to a consultancy 240,000.00 EUR (includes VAT) for an advertising campaign. Because of quality issues 300 phones were sent back by customers. They received a voucher which has not been used by them yet. As the phones were not tested when they came in they were put on stock and valued by cost of sales. Later the phones are checked and thrown away. There is no closing stock on inventories as at the end of 20X5.

The taxing authorities require a prepayment for income tax to be 90 % of the tax liabilities which is to be paid in the accounting period 20X5 already.

Required: (a) Determine the profit after taxes and the cash flow for the accounting period 20X5. Consider that VAT and income tax is to be paid in the next accounting period. (But consider the prepayment rule) Assume that the business has been established in December 20X4 by the bookkeeping entry

| | |
|----------------------------------|------------------------|
| DR Bank | 250,000.00 EUR |
| CR Capital Reserves | 50,000.00 EUR |
| CR Issued Capital | 200,000.00 EUR. |

(b) Prepare the statement of financial position at the beginning and end of the accounting period 20X5 and determine the cash flows along IAS 7 by the derivative method. Distinguish between cash flows from operating, investing and financing activities.

Lösung: (Solution)

In order to provide the full picture the solution contains the bookkeeping entries of all activities mentioned above.

(1) Share issue:

| | |
|----------------------------------|-----------------|
| DR Bank | 250,000.00 EUR |
| CR Capital Reserves | 50,000.00 EUR |
| CR Issued Capital | 200,000.00 EUR. |

(2a, 2b) Payment of the debts and refund of VAT:

| | |
|---------------------------|-------------------|
| DR A/P | 96,000.00 EUR |
| CR Bank | 96,000.00 EUR |
| DR Bank | 16,000.00 EUR |
| CR A/R (VAT) | 16,000.00 EUR |

(3) Acquisition of the assembling line:

| | |
|---------------------------------|----------------|
| DR P, P, E at cost | 100,000.00 EUR |
| DR VAT | 20,000.00 EUR |
| CR Bank | 60,000.00 EUR |
| CR A/P | 60,000.00 EUR |

(4) Depreciation of the assembling line:

| | |
|----------------------------|---------------|
| DR Depr | 20,000.00 EUR |
| CR Acc. Depr. | 20,000.00 EUR |

(5a, 5b) Purchase of phone parts:

| | |
|-------------------------------|-------------------|
| DR Inventory | 35,000.00 EUR |
| DR VAT | 7,000.00 EUR |
| CR Bank | 42,000.00 EUR |
| DR Inventory | 10,000.00 EUR |
| DR VAT | 2,000.00 EUR |
| CR A/P | 12,000.00 EUR |

(6) Salaries paid:

| | |
|--------------------------|----------------|
| DR Salaries | 310,000.00 EUR |
| CR Bank | 310,000.00 EUR |

(7) Campaign paid:

| | |
|---|-----------------------|
| DR 3rd party expenses | 200,000.00 EUR |
| DR VAT | 40,000.00 EUR |
| CR Bank | 240,000.00 EUR |

(8) Material expenses for production:

| | |
|---------------------------|-----------------------|
| DR Materials | 125,000.00 EUR |
| CR Inventory | 125,000.00 EUR |

(9) Sales of 10,000 phones. The sales revenue per phone is 100.00 EUR. Accordingly the sales revenue amounts to **1,000,000.00 EUR**.

| | |
|-----------------------|-------------------------|
| DR Bank | 1,200,000.00 EUR |
| CR VAT | 200,000.00 EUR |
| CR Sales | 1,000,000.00 EUR |

Bookkeeping are to be made in order to determine the profit and loss. Here the bookkeeping entries are made along the cost of sales format. Observe exhibit 24.

(10a, 10b, 10c) Return and voucher. The returns require to determine the unit cost for a phone. It is $(80,000 + 35,000 + 10,000 + 310,000 + 20,000)/10,000 = 45.50 \text{ EUR/p}$. Consider that 3rd party expenses are not included for reason of being non manufacturing expenses. The amount for 300 phones is $300 \cdot 45.50 = 13,650.00 \text{ EUR}$. The revenue for 300 phones is $300 \cdot 100.00 = 30,000.00 \text{ EUR}$.

| | |
|-------------------------------------|--------------------------|
| DR FG-Inventory | 13,650.00 EUR |
| CR Returns inwards | 13,650.00 EUR |
| DR Sales | 30,000.00 EUR |
| DR VAT | 6,000.00 EUR |
| CR A/P (vouchers) | 36,000.00 EUR |
| DR Impairment loss | 13,650.00 EUR |
| CR FG-Inventory | 13,650.00 EUR |

The prepayment for taxes requires to determine the profit. Observe exhibit 24. The profit after taxes amounts to 220,500.00 EUR and the tax liabilities are 94,500.00 EUR.

(11) The prepayment for taxation is $90\% \cdot 94,500 = 85,050.00 \text{ EUR}$:

DR Tax Liabilities 85,050.00 EUR
CR Bank 85,050.00 EUR

| | | | | | |
|--------------------|------------------|------------------------|-----------------|--------------------|------------------|
| Bank | | VAT | | PPE at cost | |
| D | C | D | C | D | C |
| (1) 250.000,00 | (2a) 96.000,00 | OV 16.000,00 | (2b) 16.000,00 | (3) 100.000,00 | c/d 100.000,00 |
| (2b) 16.000,00 | (3) 60.000,00 | (3) 20.000,00 | (9) 200.000,00 | b/d 100.000,00 | |
| (9) 1.200.000,00 | (5a) 42.000,00 | (5a) 7.000,00 | | | |
| | (6) 310.000,00 | (5b) 2.000,00 | | | |
| | (7) 240.000,00 | (7) 40.000,00 | | | |
| | (11) 85.050,00 | (10b) 6.000,00 | | | |
| | c/d 632.950,00 | c/d 125.000,00 | | | |
| 1.466.000,00 | 1.466.000,00 | 216.000,00 | 216.000,00 | | |
| b/d 632.950,00 | | b/d 125.000,00 | | | |
| SCap | | Cap. Res. | | Inventory | |
| D | C | D | C | D | C |
| c/d 200.000,00 | (1) 200.000,00 | c/d 50.000,00 | (1) 50.000,00 | OV 80.000,00 | (8) 125.000,00 |
| | b/d 200.000,00 | b/d 50.000,00 | | (5a) 35.000,00 | |
| | | | | (5b) 10.000,00 | |
| | | | | 125.000,00 | 125.000,00 |
| A/P | | Depr | | Acc. Depr. | |
| D | C | D | C | D | C |
| (2a) 96.000,00 | OV 96.000,00 | (4) 20.000,00 | WIP 20.000,00 | c/d 20.000,00 | (4) 20.000,00 |
| | (3) 60.000,00 | | | b/d 20.000,00 | |
| | (5b) 12.000,00 | | | | |
| c/d 108.000,00 | (10b) 36.000,00 | | | | |
| 204.000,00 | 204.000,00 | | | | |
| b/d 108.000,00 | | | | | |
| Salaries | | 3rd party exp | | Sales | |
| D | C | D | C | D | C |
| (6) 310.000,00 | WIP 310.000,00 | (7) 200.000,00 | P&L 200.000,00 | (10b) 30.000,00 | (9) 1.000.000,00 |
| | | | | P&L 970.000,00 | |
| | | | | 1.000.000,00 | 1.000.000,00 |
| Materials | | WIP | | FG | |
| D | C | D | C | D | C |
| 125.000,00 | WIP 125.000,00 | Mat 125.000,00 | FG 455.000,00 | WIP 455.000,00 | COS 455.000,00 |
| | | Sal 310.000,00 | | (10a) 13.650,00 | (10c) 13.650,00 |
| | | Depr 20.000,00 | | 468.650,00 | 468.650,00 |
| | | 455.000,00 | 455.000,00 | | |
| C.O.S. | | Returns inwards | | Imp. loss | |
| D | C | D | C | D | C |
| FG 455.000,00 | P&L 455.000,00 | P&L 13.650,00 | (10a) 13.650,00 | (10c) 13.650,00 | P&L 13.650,00 |
| P&L | | Tax Liab. | | R/E | |
| D | C | D | C | D | C |
| COS 455.000,00 | Sales 970.000,00 | (11) 85.050,00 | P&L 94.500,00 | c/d 220.500,00 | P&L 220.500,00 |
| IL 13.650,00 | R.I. 13.650,00 | c/d 9.450,00 | | b/d 220.500,00 | |
| 3rd pty 200.000,00 | | 94.500,00 | 94.500,00 | | |
| EBT 315.000,00 | | b/d 9.450,00 | | | |
| 983.650,00 | 983.650,00 | | | | |
| Tax 94.500,00 | EBT 315.000,00 | | | | |
| R/E 220.500,00 | | | | | |
| 315.000,00 | 315.000,00 | | | | |

Exhibit 1: Accounts for SIEVERSHAUSEN

After making all bookkeeping entries the statement of cash flows for SIEVERSHAUSEN can be prepared. The cash flow from investing activities is -60,000.00 EUR. The cash flow from financing activities is nil. The cash flow from operating activities is $16,000 + 1,200,000 - 96,000 - 42,000 - 310,000 - 240,000 - 85,050 = 442,950.00$ EUR. Checking the result can be done by comparing total cash flow resulting

from cash account to the total of cash flows: $632,950 - 250,000 = 382,950.00 \text{ EUR}$; $442,950 - 60,000 = 382,950.00 \text{ EUR}$.

(b) Derivative method:

The statement of financial position is provided in exhibit 25. It contains along IAS 1 the comparative information from 20X4: The amounts combined are P, P, E_{20X5}: $100,000 - 20,000 = 80,000.00 \text{ EUR}$.

Trade and other payables_{20X5}: $125,000 + 108,000 = 233,000.00 \text{ EUR}$.

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

| | 20X5 | 20X4 |
|---------------------------------------|--------------------------|--------------------------|
| | [EUR] | [EUR] |
| Non-current assets | | |
| Property, plant and equipment | 80.000,00 | |
| Investment property | | |
| Intangible assets | | |
| Financial assets | | |
| Investment accounted [...] | | |
| <i>Total of non-current assets</i> | <u>80.000,00</u> | <u>0,00</u> |
| Current assets | | |
| Inventories | 0,00 | 80.000,00 |
| Trade and other receivables | | 16.000,00 |
| Cash and cash equivalents | 632.950,00 | 250.000,00 |
| Prepaid expenses | | |
| <i>Total of current assets</i> | <u>632.950,00</u> | <u>346.000,00</u> |
| Total assets | <u><u>712.950,00</u></u> | <u><u>346.000,00</u></u> |
| Liabilities | | |
| [...] Interest bearing liabilities | | |
| Trade and other payables | 233.000,00 | 96.000,00 |
| Provisions | | |
| Liabilities and assets [...] IAS 12 | 9.450,00 | |
| Deferred tax liabilities [...] IAS 12 | | |
| Deferred income | | |
| <i>Total of liabilities</i> | <u>242.450,00</u> | <u>96.000,00</u> |
| Capital | | |
| Issued capital | 200.000,00 | 200.000,00 |
| Other reserves | 50.000,00 | 50.000,00 |
| Retained earnings | 220.500,00 | 0,00 |
| <i>Total of shareholder's equity</i> | <u>470.500,00</u> | <u>250.000,00</u> |
| Total equity and liabilities | <u><u>712.950,00</u></u> | <u><u>346.000,00</u></u> |

Exhibit 2: SIEVERSHAUSEN's Statement of Financial Position

Doing cash flows via derivative method requires the delta-SFP. It is provided in exhibit 26:

| Delta-SFP for 20X5 | | | |
|--------------------|---------------------|-------------|---------------------|
| D | | | C |
| 20X5 | [EUR] | 20X5 | [EUR] |
| Δ-P,P,E | 80.000,00 | Δ-R/E | 220.500,00 |
| Δ-Inventory | -80.000,00 | Δ-A/P | 137.000,00 |
| Δ-A/R | -16.000,00 | Δ-Tax liab. | 9.450,00 |
| Δ-Cash | 382.950,00 | | |
| | <u>366.950,00</u> | | <u>366.950,00</u> |
| Δ-P,P,E | <u>100.000,00</u> | Depr | <u>20.000,00</u> |
| | | Inv+ | <u>80.000,00</u> |
| | <u>849.900,00</u> | A/R+ | <u>16.000,00</u> |
| | | | <u>849.900,00</u> |
| Mat | <u>125.000,00</u> | Rev | <u>970.000,00</u> |
| Salaries | 310.000,00 | | |
| Depr- | 20.000,00 | | |
| 3rd party exp | 200.000,00 | | |
| Tax exp | 94.500,00 | | |
| | <u>2.429.300,00</u> | | <u>2.429.300,00</u> |
| Tax pay (I) | 85.050,00 | VAT in (II) | 16.000,00 |
| net purch | 45.000,00 | | |
| gross inv | 120.000,00 | gross rev | 1.164.000,00 |
| 3rd gross | 240.000,00 | | |
| VAT | 125.000,00 | | |
| Gross pur | 54.000,00 | | |
| | <u>4.963.150,00</u> | | <u>4.963.150,00</u> |
| | | A/R | <u>12.000,00</u> |
| | <u>9.801.300,00</u> | | <u>9.801.300,00</u> |
| Purch paid | 42.000,00 | | |

Exhibit 3: Delta SFP

The difference between tax expenses and tax liabilities indicates a tax payment: $94,500 - 9,450 =$ **85,050.00 EUR. (I).**

The decrease of A/R indicates cash input. (consider the name A/R+ comes from the debit side.) For that reason A/R+ is replaced by an operating cash in for VAT by the amount of 16,000.00 EUR (II).

Material expenses (net of VAT yet) are offset against the opening value for materials: $125,000 - 80,000 =$ **45,000.00 EUR.**

The amounts for P, P, E, for materials, for 3rd party expenses, and for changes in inventory are still net amounts. The replacement of net amounts by gross amounts requires to add VAT paid in the delta SFP. For that reason input VAT and output VAT is to be computed. Both have been paid in case of cash payments of have not yet been paid in case of purchases/sales on credit. Input VAT amounts to $(100,000 + 45,000 + 200,000) \cdot 20\% =$ **69,000.00 EUR.** Output VAT amounts to $970,000 \cdot 20\% =$ **194,000.00 EUR.** The difference is: $194,000 - 69,000 =$ **125,000 EUR.** This amount is displayed on the debit side. It is offset against liabilities or receivables later.

In the next step the VAT liability is offset against the A/P because it is for sure that VAT has not been paid yet (convention for this text book: VAT is to be paid in the next year.). Remaining liabilities are $137,000 - 125,000 =$ **12,000.00 EUR.**

At this stage the derivative method cannot add further information.

From the task it is known that one purchase 12,000 EUR (gross) was on credit. The amount is offset against A/P which gives a remaining purchase to be $54,000 - 12,000 =$ **42,000.00 EUR.**

Additionally, there was a liability 96,000.00 EUR at the beginning of the accounting period. This amount is per coincidence the same amount as the 60,000.00 EUR owed to the suppliers and the 36,000.00 EUR

owed to the customers who sent back their phones. For that reason the derivative method is not able to determine a proper cash flow statement here. The 60,000.00 EUR will be regarded as cash flow from operating activities instead as cash flow from investing activities. Along the derivative method the statement of cash flows is like exhibit 27 as long as no further information is provided:

**Sievershausen Ltd's
STATEMENT of CASH FLOWS
for 20X5**

| | 20X5 |
|-------------------------------------|--------------------------|
| | [EUR] |
| CF from operating activities | |
| Revenue | 1.164.000,00 |
| Labour | (310.000,00) |
| 3rd party | (240.000,00) |
| Materials | (42.000,00) |
| VAT | 16.000,00 |
| Income tax | (85.050,00) |
| | <u>502.950,00</u> |
| CF from investing activities | |
| Assembling line | (120.000,00) |
| | <u>(120.000,00)</u> |
| CF from financing activities | |
| Nil | 0,00 |
| | 0,00 |
| Total cash flow: | <u>382.950,00</u> |

Exhibit 4: Statement of Cash Flows