Task IM-14.12: Exercise on Discounting Liabilities

LUEKENKAMP (Pty) Ltd. is established on 1.01.20X3 by a share issue of 10,000 shares at 5.00 EUR.

On 2.01.20X3, LUEKENKAMP (Pty) Ltd. takes a bank loan of 20,000.00 EUR. The bank loan is paid into LUEKENKAMP (Pty) Ltd.'s bank account. The interest of the bank loan is 3.00 % based on the nominal bank loan's amount. The pay-off is 2,500.00 EUR per annum. On 30.06.20X5, LUEKENKAMP (Pty) Ltd. pays-off an extra amount of 5,000.00 EUR. The pay-off is to be considered in the interest/pay-off scheme. The capital market rate of interest for bank loans equals to 1.5 %/a.

In order to increase financing, LUEKENKAMP (Pty) Ltd. issues 1,000 bonds at 10.00 EUR each on 1.07.20X4. The bonds will be redeemed after 10 years' time. The bond's coupon rate equals to 4.5 %, which is 0.5 % higher than the rate paid on similar bonds on the capital market. The coupon is paid in June every year.

In 20X4, LUEKENKAMP (Pty) Ltd. recognises a provision for future operating losses as it shows 15,000.00 EUR bad debts on its balance sheet as receivables. The receivables result from unpaid bills by customers. The bad debts have been handed over to an attorney for collection during 20X4. However, the debtor is to be considered boke and won't probably not be able to pay. The chance to collect the money is estimated by the attorney's office to be 10 %. Consider VAT!

Required: Prepare the liability section as far as possible for 20X4. Apply a capital market rate of 1.50 % for loans and of 4.00 % for bonds. Record the bookkeeping entry for bad debts recognition.

Solution

On 31.12.20X4, the bank loans discounted value equals to 7,280.50 with regard to the long-term liabilities and to 7,500.00 EUR with regard to short-term liabilities.

The bonds' value equals to $10,000 \times (1 + 4\%)^{-10} = 6,755.64$ EUR.

LUEKENKAMP (Pty) Ltd. recognises a provision for future operating losses to the extent of $90\% \times 15,000$ = **13,500.00 EUR**.

DR	Other Expenses (bad debts)	11,250.00	EUR
DR	VAT	2,250.00	EUR
CR	Provisions	13,500.00	EUR

See the payment schema for the bank loan.

Lükenkamp (Pty) Ltd.'s INTEREST/PAY-OFF PLAN											
Year	Opening amou	unt Inte	Interest		off	Annuity	Rest				
	[EUR]	[El	[EUR]		R]	[EUR]	[EUR]				
20X3	20,000.0	0	600.00	2,500.00			17,500.00				
20X4	17,500.0	0 !	525.00	2,500.00			15,000.00				
20X5	15,000.0	0	375.00		00.00		7,500.00				
20X6	7,500.0	7,500.00		2,500.00			5,000.00				
20X7	5,000.00		150.00	0.00 2,500.00			2,500.00				
20X8	2,500.0	0	75.00	2,5	00.00		0.00				
						-					
.'s INTE			0.015	;							
Year	short-t	long-t	discounting			_					
20X3											
20X4											
20X5	7,500.00										
20X6		2,500.00	0.9852	1	2,463.05						
20X7		2,500.00	0.9707	2	2,426.65						
20X8		2,500.00	0.9563	3	2,390.79	_					
				=	7,280.50	=					

0.03 rate of interest

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