
**INTERPRETATION OF
STATUTORY BOARD
FINANCIAL
REPORTING STANDARD**

INT SB-FRS 101

**Changes in Existing Decommissioning,
Restoration and Similar Liabilities**
Illustrative Examples

Illustrative examples

These examples accompany, but are not part of, INT SB-FRS 101.

Common facts

- IE1 An entity has a nuclear power plant and a related decommissioning liability. The nuclear power plant started operating on 1 January 2000. The plant has a useful life of 40 years. Its initial cost was CU120,000¹; this included an amount for decommissioning costs of CU10,000, which represented CU70,400 in estimated cash flows payable in 40 years discounted at a risk-adjusted rate of 5 per cent. The entity's financial year ends on 31 December.

Example 1: Cost model

- IE2 On 31 December 2009, the plant is 10 years old. Accumulated depreciation is CU30,000 (CU120,000 × ¹⁰/₄₀ years). Because of the unwinding of discount (5 per cent) over the 10 years, the decommissioning liability has grown from CU10,000 to CU16,300.
- IE3 On 31 December 2009, the discount rate has not changed. However, the entity estimates that, as a result of technological advances, the net present value of the decommissioning liability has decreased by CU8,000. Accordingly, the entity adjusts the decommissioning liability from CU16,300 to CU8,300. On this date, the entity makes the following journal entry to reflect the change:

	CU	CU
Dr decommissioning liability	8,000	
Cr cost of asset		8,000

- IE4 Following this adjustment, the carrying amount of the asset is CU82,000 (CU120,000 – CU8,000 – CU30,000), which will be depreciated over the remaining 30 years of the asset's life giving a depreciation expense for the next year of CU2,733 (CU82,000 ÷ 30). The next year's finance cost for the unwinding of the discount will be CU415 (CU8,300 × 5 per cent).
- IE5 If the change in the liability had resulted from a change in the discount rate, instead of a change in the estimated cash flows, the accounting for the change would have been the same but the next year's finance cost would have reflected the new discount rate.

¹ In these examples, monetary amounts are denominated in 'currency units (CU)'.

Example 2: Revaluation model

- IE6 The entity adopts the revaluation model in S B - FRS 16 whereby the plant is revalued with sufficient regularity that the carrying amount does not differ materially from fair value. The entity's policy is to eliminate accumulated depreciation at the revaluation date against the gross carrying amount of the asset.
- IE7 When accounting for revalued assets to which decommissioning liabilities attach, it is important to understand the basis of the valuation obtained. For example:
- (a) if an asset is valued on a discounted cash flow basis, some valuers may value the asset without deducting any allowance for decommissioning costs (a 'gross' valuation), whereas others may value the asset after deducting an allowance for decommissioning costs (a 'net' valuation), because an entity acquiring the asset will generally also assume the decommissioning obligation. For financial reporting purposes, the decommissioning obligation is recognised as a separate liability, and is not deducted from the asset. Accordingly, if the asset is valued on a net basis, it is necessary to adjust the valuation obtained by adding back the allowance for the liability, so that the liability is not counted twice.²
 - (b) if an asset is valued on a depreciated replacement cost basis, the valuation obtained may not include an amount for the decommissioning component of the asset. If it does not, an appropriate amount will need to be added to the valuation to reflect the depreciated replacement cost of that component.
- IE8 Assume that a market-based discounted cash flow valuation of CU115,000 is obtained at 31 December 2002. It includes an allowance of CU11,600 for decommissioning costs, which represents no change to the original estimate, after the unwinding of three years' discount. The amounts included in the statement of financial position at 31 December 2002 are therefore:

	CU
Asset at valuation (1)	126,600
Accumulated depreciation	nil
Decommissioning liability	(11,600)
Net assets	<u>115,000</u>
Retained earnings (2)	(10,600)
Revaluation surplus (3)	15,600

Notes:

- 1 Valuation obtained of CU115,000 plus decommissioning costs of CU11,600, allowed for in the valuation but recognised as a separate liability = CU126,600.
- 2 Three years' depreciation on original cost $CU120,000 \times \frac{3}{40} = CU9,000$ plus cumulative discount on CU10,000 at 5 per cent compound = CU1,600; total CU10,600.
- 3 Revalued amount CU126,600 less previous net book value of CU111,000 (cost CU120,000 less accumulated depreciation CU9,000).

² For examples of this principle, see FRS 36 *Impairment of Assets* and FRS 40 *Investment Property*.

IE9 The depreciation expense for 2003 is therefore CU3,420 ($\text{CU}126,600 \times \frac{1}{37}$) and the discount expense for 2003 is CU600 (5 per cent of CU11,600). On 31 December 2003, the decommissioning liability (before any adjustment) is CU12,200 and the discount rate has not changed. However, on that date, the entity estimates that, as a result of technological advances, the present value of the decommissioning liability has decreased by CU5,000. Accordingly, the entity adjusts the decommissioning liability from CU12,200 to CU7,200.

IE10 The whole of this adjustment is taken to revaluation surplus, because it does not exceed the carrying amount that would have been recognised had the asset been carried under the cost model. If it had done, the excess would have been taken to profit or loss in accordance with paragraph 6(b). The entity makes the following journal entry to reflect the change:

	CU	CU
Dr decommissioning liability	5,000	
Cr revaluation surplus		5,000

IE11 The entity decides that a full valuation of the asset is needed at 31 December 2003, in order to ensure that the carrying amount does not differ materially from fair value. Suppose that the asset is now valued at CU107,000, which is net of an allowance of CU7,200 for the reduced decommissioning obligation that should be recognised as a separate liability. The valuation of the asset for financial reporting purposes, before deducting this allowance, is therefore CU114,200. The following additional journal entry is needed:

	CU	CU
Dr accumulated depreciation (1)	3,420	
Cr asset at valuation		3,420
Dr revaluation surplus (2)	8,980	
Cr asset at valuation (3)		8,980

Notes:

- 1 Eliminating accumulated depreciation of CU3,420 in accordance with the entity's accounting policy.
- 2 The debit is to revaluation surplus because the deficit arising on the revaluation does not exceed the credit balance existing in the revaluation surplus in respect of the asset.
- 3 Previous valuation (before allowance for decommissioning costs) CU126,600, less cumulative depreciation CU3,420, less new valuation (before allowance for decommissioning costs) CU114,200.

IE12 Following this valuation, the amounts included in the statement of financial position are:

	CU
Asset at valuation	114,200
Accumulated depreciation	nil
Decommissioning liability	(7,200)
Net assets	<u>107,000</u>
Retained earnings (1)	(14,620)
Revaluation surplus (2)	11,620

Notes:

- 1 CU10,600 at 31 December 2002 plus 2003's depreciation expense of CU3,420 and discount expense of CU600 = CU14,620.
- 2 CU15,600 at 31 December 2002, plus CU5,000 arising on the decrease in the liability, less CU8,980 deficit on revaluation = CU11,620.

Example 3: Transition

IE13 The following example illustrates retrospective application of the Interpretation for preparers that already apply SB-FRSs. Retrospective application is required by SB-FRS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*, where practicable, and is the benchmark treatment in the previous version of SB-FRS 8. The example assumes that the entity:

- (a) adopted SB-FRS 37 on 1 July 1999;
- (b) adopts the Interpretation on 1 January 2005; and
- (c) before the adoption of the Interpretation, recognised changes in estimated cash flows to settle decommissioning liabilities as income or expense.

IE14 On 31 December 2000, because of the unwinding of the discount (5 per cent) for one year, the decommissioning liability has grown from CU10,000 to CU10,500. In addition, based on recent facts, the entity estimates that the present value of the decommissioning liability has increased by CU1,500 and accordingly adjusts it from CU10,500 to CU12,000. In accordance with its then policy, the increase in the liability is recognised in profit or loss.

IE15 On 1 January 2005, the entity makes the following journal entry to reflect the adoption of the Interpretation:

	CU	CU
Dr cost of asset	1,500	
Cr accumulated depreciation		154
Cr opening retained earnings		1,346

- IE16 The cost of the asset is adjusted to what it would have been if the increase in the estimated amount of decommissioning costs at 31 December 2000 had been capitalised on that date. This additional cost would have been depreciated over 39 years. Hence, accumulated depreciation on that amount at 31 December 2004 would be CU154 ($CU1,500 \times \frac{4}{39}$ years).
- IE17 Because, before adopting the Interpretation on 1 January 2005, the entity recognised changes in the decommissioning liability in profit or loss, the net adjustment of CU1,346 is recognised as a credit to opening retained earnings. This credit is not required to be disclosed in the financial statements, because of the restatement described below.
- IE18 SB-FRS 8 requires the comparative financial statements to be restated and the adjustment to opening retained earnings at the start of the comparative period to be disclosed. The equivalent journal entries at 1 January 2004 are shown below. In addition, depreciation expense for the year ended 31 December 2004 is increased by CU39 from the amount previously reported:

	CU	CU
Dr cost of asset	1,500	
Cr accumulated depreciation		115
Cr opening retained earnings		1,385