

**SB-FRS 19—The Limit on a Defined Benefit
Asset, Minimum Funding Requirements and
their Interaction**
Illustrative Examples

Illustrative examples

These examples accompany, but are not part of, INT SB-FRS 114.

Example 1—Effect of the minimum funding requirement when there is a SB-FRS 19 surplus and the minimum funding contributions payable are fully refundable to the entity

- IE1 An entity has a funding level on the minimum funding requirement basis (which is measured on a different basis from that required under SB-FRS 19) of 82 per cent in Plan A. Under the minimum funding requirements, the entity is required to increase the funding level to 95 per cent immediately. As a result, the entity has a statutory obligation at the end of the reporting period to contribute 200 to Plan A immediately. The plan rules permit a full refund of any surplus to the entity at the end of the life of the plan. The year-end valuations for Plan A are set out below.

Fair value of assets	1,200
Present value of defined benefit obligation under SB-FRS 19	(1,100)
Surplus	100

Application of requirements

- IE2 Paragraph 24 of INT SB-FRS 114 requires the entity to recognise a liability to the extent that the contributions payable are not fully available. Payment of the contributions of 200 will increase the SB-FRS 19 surplus from 100 to 300. Under the rules of the plan this amount will be fully refundable to the entity with no associated costs. Therefore, no liability is recognised for the obligation to pay the contributions and the net defined benefit asset is 100.

Example 2—Effect of a minimum funding requirement when there is a SB-FRS 19 deficit and the minimum funding contributions payable would not be fully available

- IE3 An entity has a funding level on the minimum funding requirement basis (which is measured on a different basis from that required under SB-FRS 19) of 77 per cent in Plan B. Under the minimum funding requirements, the entity is required to increase the funding level to 100 per cent immediately. As a result, the entity has a statutory obligation at the end of the reporting period to pay additional contributions of 300 to Plan B. The plan rules permit a maximum refund of 60 per cent of the SB-FRS 19 surplus to the entity and the entity is not permitted to reduce its contributions below a specified level which happens to equal the SB-FRS 19 service cost. The year-end valuations for Plan B are set out below.

Fair value of assets	1,000
Present value of defined benefit obligation under FRS 19	(1,100)
Deficit	(100)

Application of requirements

- IE4 The payment of 300 would change the SB-FRS 19 deficit of 100 to a surplus of 200. Of this 200, 60 per cent (120) is refundable.
- IE5 Therefore, of the contributions of 300, 100 eliminates the SB-FRS 19 deficit and 120 (60 per cent of 200) is available as an economic benefit. The remaining 80 (40 per cent of 200) of the contributions paid is not available to the entity.
- IE6 Paragraph 24 of INT SB-FRS 114 requires the entity to recognise a liability to the extent that the additional contributions payable are not available to it.
- IE7 Therefore, the net defined benefit liability is 180, comprising the deficit of 100 plus the additional liability of 80 resulting from the requirements in paragraph 24 of INT SB-FRS 114. No other liability is recognised in respect of the statutory obligation to pay contributions of 300.

Summary

Fair value of assets	1,000
Present value of defined benefit obligation under FRS 19	(1,100)
Deficit	(100)
Effect of the asset ceiling	(80)
Net defined benefit liability	(180)

- IE8 When the contributions of 300 are paid, the net defined benefit asset will be 120.

Example 3—Effect of a minimum funding requirement when the contributions payable would not be fully available and the effect on the economic benefit available as a future contribution reduction

- IE9 An entity has a funding level on the minimum funding basis (which it measures on a different basis from that required by SB-FRS 19) of 95 per cent in Plan C. The minimum funding requirements require the entity to pay contributions to increase the funding level to 100 per cent over the next three years. The contributions are required to make good the deficit on the minimum funding basis (shortfall) and to cover future service.
- IE10 Plan C also has a SB-FRS 19 surplus at the end of the reporting period of 50, which cannot be refunded to the entity under any circumstances.

- IE11 The nominal amounts of contributions required to satisfy the minimum funding requirements in respect of the shortfall and the future service for the next three years are set out below.

Year	Total contributions for minimum funding requirement	Contributions required to make good the shortfall	Contributions required to cover future service
1	135	120	15
2	125	112	13
3	115	104	11

Application of requirements

- IE12 The entity's present obligation in respect of services already received includes the contributions required to make good the shortfall but does not include the contributions required to cover future service.

- IE13 The present value of the entity's obligation, assuming a discount rate of 6 per cent per year, is approximately 300, calculated as follows:

$$[120/(1.06) + 112/(1.06)^2 + 104/(1.06)^3]$$

- IE14 When these contributions are paid into the plan, the FRS 19 surplus (ie the fair value of assets less the present value of the defined benefit obligation) would, other things being equal, increase from 50 to 350 (300 + 50).

- IE15 However, the surplus is not refundable although an asset may be available as a future contribution reduction.

- IE16 In accordance with paragraph 20 of INT SB - FRS 114, the economic benefit available as a reduction in future contributions is the sum of:

- any amount that reduces future minimum funding requirement contributions for future service because the entity made a prepayment (ie paid the amount before being required to do so); and
- the estimated future service cost in each period in accordance with paragraphs 16 and 17, less the estimated minimum funding requirement contributions that would be required for future service in those periods if there were no prepayment as described in (a).

- IE17 In this example there is no prepayment as described in paragraph 20(a). The amounts available as a reduction in future contributions when applying paragraph 20(b) are set out below.

Year	SB-FRS 19 service cost	Minimum contributions required to cover future service	Amount available as contribution reduction
1	13	15	(2)
2	13	13	0
3	13	11	2
4+	13	9	4

- IE18 Assuming a discount rate of 6 per cent, the present value of the economic benefit available as a future contribution reduction is therefore equal to:

$$(2)/(1.06) + 0/(1.06)^2 + 2/(1.06)^3 + 4/(1.06)^4 \dots = 56$$

Thus in accordance with paragraph 58(b) of FRS 19, the present value of the economic benefit available from future contribution reductions is limited to 56.

- IE19 Paragraph 24 of INT SB-FRS 114 requires the entity to recognise a liability to the extent that the additional contributions payable will not be fully available. Therefore, the effect of the asset ceiling is 294 (50 + 300 – 56).
- IE20 The entity recognises a net defined benefit liability of 244 in the statement of financial position. No other liability is recognised in respect of the obligation to make contributions to fund the minimum funding shortfall.

Summary

Surplus	50
Net defined benefit asset (before consideration of the minimum funding requirement)	50
Effect of the asset ceiling	(294)
Net defined benefit liability	(244)

- IE21 When the contributions of 300 are paid into the plan, the net defined benefit asset will become 56 (300 – 244).

Example 4—Effect of a prepayment when a minimum funding requirement exceeds the expected future service charge

- IE22 An entity is required to fund Plan D so that no deficit arises on the minimum funding basis. The entity is required to pay minimum funding requirement contributions to cover the service cost in each period determined on the minimum funding basis.
- IE23 Plan D has a SB-FRS 19 surplus of 35 at the beginning of 20X1. This example assumes that the discount rate and expected return on assets are 0 per cent, and that the plan cannot refund the surplus to the entity under any circumstances but can use the surplus for reductions of future contributions.
- IE24 The minimum contributions required to cover future service are 15 for each of the next five years. The expected SB-FRS 19 service cost is 10 in each year.

IE25 The entity makes a prepayment of 30 at the beginning of 20X1 in respect of years 20X1 and 20X2, increasing its surplus at the beginning of 20X1 to 65. That prepayment reduces the future contributions it expects to make in the following two years, as follows:

Year	SB-FRS 19 service cost	Minimum funding requirement contribution before prepayment	Minimum funding requirement contribution after prepayment
20X1	10	15	0
20X2	10	15	0
20X3	10	15	15
20X4	10	15	15
20X5	10	15	15
Total	50	75	45

Application of requirements

IE26 In accordance with paragraphs 20 and 22 of INT SB-FRS 114, at the beginning of 20X1, the economic benefit available as a reduction in future contributions is the sum of:

- (a) 30, being the prepayment of the minimum funding requirement contributions; and
- (b) nil. The estimated minimum funding requirement contributions required for future service would be 75 if there was no prepayment. Those contributions exceed the estimated future service cost (50); therefore the entity cannot use any part of the surplus of 35 noted in paragraph IE23 (see paragraph 22).

IE27 Assuming a discount rate of 0 per cent, the present value of the economic benefit available as a reduction in future contributions is equal to 30. Thus in accordance with paragraph 64 of SB-FRS 19 the entity recognises a net defined benefit asset of 30 (because this is lower than the SB-FRS 19 surplus of 65).