Actual Valuation

Actuarial Valuation

of Employee Benefits

as of 31 December 2022

and preview for the period

1 January 2023 - 31 December 2023

according to the principles of the

International Accounting Standards Board (IASB)

IAS 19

for

Muster GmbH
Schlossallee 123
12345 Musterstadt

Actuarial Valuation of Employee Benefits
as of 31 December 2022 according to IAS 19
for

Muster GmbH

(1) Instruction

The entity instructed us to calculate the following amounts for the existing obligations in accordance with the international accounting principles IAS 19:

- Defined benefit obligation (DBO) as of 31 December 2022
- Current service cost of the next period as of 1 January 2023
- Pension expense of the reporting period
- Development of the defined benefit liability / defined benefit asset in the next period.

The actuarial assumptions and applied methods have been discussed with the entity.

(2) Actuarial results (summary)

Status	Number of persons	Defined benefit obligation as of 31 Dec 2022 in €	Current service cost of the next period as of 1 Jan 2023 in €
Employees in service (vested benefits)	2	343.426	21.136
Employees in service (non-vested benefits)	0	0	0
Former Employees	0	0	0
Pensioners (old age pension)	0	0	0
Pensioners (disability pension)	0	0	0
Pensioners (widow's/widower's pension)	0	0	0
Temporary annuity/compensation	0	0	0
Total amount	2	343.426	21.136

Berlin, 6 April 2023

Pfefferminzia Lebensversicherung AG

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(3) Reconciliation of opening and closing balances

	Pension expense in €	Contributions paid by the reporting entity in €	Defined benefit obligation in €	Fair value of any plan assets in €	Past service cost not yet recognised in €	Effect of the asset ceiling in €	Balance sheet approach in €	Recognised gains (-) losses (+) in the equity in €
Present value 1 Jan 2022	--	--	-645.350	300.000	0	0	-345.350	345.350
Past service cost	--	--	0	--	0	--	--	--
Current service cost	43.510	--	-43.510	--	--	--	--	--
Interest cost	8.067	--	-8.067	--	--	--	--	--
Return on plan assets	-4.687	--	--	4.687	--	--	--	--
Recognition gains/losses	0	--	--	--	--	--	--	--
Recognition past service cost	--	--	--	--	--	--	--	--
Contributions paid by the entity	--	-150.000	--	150.000	--	--	--	--
Benefits paid by the entity	--	--	0	0	--	--	--	--
Effect of any curtailments	0	--	--	--	0	--	--	--
Effect of any settlements	0	--	--	--	0	--	--	--
New gains/losses	--	--	353.501	50.313	--	--	--	-403.814
Present value without <asset ceiling>	46.890	-150.000	-343.426	505.000	0	--	161.574	-58.464
Immediate recognition	0	--	--	--	0	--	--	--
Adjustment	161.574	--	--	--	--	-161.574	--	--
Present value 31 Dec 2022	208.464	-150.000	-343.426	505.000	0	-161.574	0	-58.464

Annotations

(a) Actuarial gains and losses are recognised outside profit or loss. They shall be presented in a *statement of changes in entity.*

(b) The *discount rate* as determined at the start of the period was 1,25 %.

(c) The *present value of any economic benefits available* amounted at the start of the reporting period 0 € and at the end of the reporting period 0 €.

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(4) Disclosure as of 31 December 2022

(a) Accounting policy for recognising actuarial gains und losses

	31 December 2022
Applied method	Recognition of all gains/losses through OCI (Other Comprehensive Income)
Period of recognition	Immediate recognition

(b) General description of the type of plan and remarks

Defined Benefit Plan

(c) Actuarial assumptions

	31 December 2022
Actuarial cost method	Projected unit credit method (PUCM)
Mortality and disability assumptions	HEUBECK-RICHTTAFELN 2018 G
Expected age of retirement	contractual retirement
Turnover rates	no turnover rate
Discount rate	4 % p.a.
Expected rates of return on any plan assets	4 % p.a.
Pension increase rate	guaranteed rate

(d) Development of the obligation and the plan assets

	31 Dec 2021 in €	31 Dec 2022 in €
Defined benefit obligation	-645.350	-343.426
Fair value of plan assets	300.000	505.000
Surplus(+) / Deficit(-)	-345.350	161.574

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(e) Experience adjustments

	31 Dec 2022 in %
Defined benefit obligation	-50,72
Fair value of plan assets	11,07

(f) Sensitivity - variation of the discount rate

Status	Defined benefit obligation Discount rate [3 % p.a.] in €	Defined benefit obligation Discount rate 4 % p.a. in €	Defined benefit obligation Discount rate [5 % p.a.] in €
Employees in service (vested benefits)	437.267	343.426	272.864
Employees in service (non-vested benefits)	0	0	0
Former Employees	0	0	0
Pensioners (old age pension)	0	0	0
Pensioners (disability pension)	0	0	0
Pensioners (widow's/widower's pension)	0	0	0
Temporary annuity/compensation	0	0	0
Total amount	437.267	343.426	272.864

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(5) Expected development for the next period

	Pension expense in €	Contributions paid by the reporting entity in €	Defined benefit obligation in €	Fair value of any plan assets in €	Past service cost not yet recognised in €	Effect of the asset ceiling in €	Balance sheet approach in €	Recognised gains (-) losses (+) in the equity in €
Present value 1 Jan 2023	--	--	-343.426	505.000	0	-161.574	0	-58.464
Past service cost	--	--	0	--	0	--	--	--
Current service cost	21.981	--	-21.981	--	--	--	--	--
Interest cost	13.737	--	-13.737	--	--	--	--	--
Return on plan assets	-20.200	--	--	20.200	--	--	--	--
Recognition gains/losses	0	--	--	--	--	--	--	--
Recognition past service cost	--	--	--	--	--	--	--	--
Contributions paid by the entity	--	0	--	0	--	--	--	--
Benefits paid by the entity	--	--	0	0	--	--	--	--
Effect of any curtailments	0	--	--	--	0	--	--	--
Effect of any settlements	0	--	--	--	0	--	--	--
New gains/losses	--	--	0	0	--	--	--	0
Present value without <asset ceiling>	15.518	0	-379.144	525.200	0	--	146.056	-58.464
Immediate recognition	0	--	--	--	0	--	--	--
Adjustment	-15.518	--	--	--	--	15.518	--	--
Present value 31 Dec 2023	0	0	-379.144	525.200	0	-146.056	0	-58.464

Annotations

(a) Actuarial gains and losses are recognised outside profit or loss. They shall be presented in a *statement of changes in entity.*

(b) The *discount rate* as determined at the start of the period was 4 %.

(c) The *present value of any economic benefits available* amounted at the start of the reporting period 0 € and at the end of the reporting period 0 €.

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(6) Actuarial results (personal data)

No.	Name	Date of Birth	M/F	Date of Entry	Period of Service	Defined benefit obligation as of 31 Dec 2022 in €	Current service cost of the next period in €	Benefits paid (reporting period) in €
01	Muster	15 Mar 1970	M	1 Jan 2000	1 Jan 2006 - 31 Mar 2037	298.250	17.010	0

Total:	298.250	17.010	0

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No.	Name	Date of Birth	M/F	Date of Entry	Period of Service	Defined benefit obligation as of 31 Dec 2022 in €	Current service cost of the next period in €	Benefits paid (reporting period) in €
01	Maier	4 May 1975	F	1 Jun 2012	1 Jun 2012 - 31 May 2042	45.176	4.126	0

Total:		45.176	4.126	0

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General comments

1. Applicable regulations

The history of the IAS 19 can be traced back to the year 1980. The current IAS 19 (revised 2011) has developed from the preceding standards IAS 19 (revised 1983), IAS 19 (revised 1993), IAS 19 (revised 2004) and IAS 19 (revised 2008). When first adopting this standard, IFRS 1, mandatory for annual periods beginning after 31 December 2003, must be considered.

2. Balance sheet approach

The principle of IAS 19 is recognising the cost of providing employee benefits in the period in which the benefit is earned by the employee (income approach).

3. Actuarial valuation

According to IAS 19 the Projected Unit Credit Method is the only valuation method allowed. The present value of the Defined Benefit Obligation is the present value of the earned, realistically measured, entitlements to post-employment benefits. For German employee benefit plans the earned entitlements normally result from the *degressive m/n-method.* Note that vested benefits are considered to be earned. IAS 19 claims a realistic measurement. This means that demographic and financial assumptions should be unbiased and mutually compatible. As a general rule demographic and financial assumptions concerning the following points should be made:

- biometric actuarial assumptions
- turn over rates
- discount rate
- expected return on plan assets [IAS 19 (revised 2011): = discount rate]
- expected salary increase
- trend of any assessment basis
- increase of current annuities.

4. Actuarial gains and losses

The assumptions mentioned in section 3 are estimations to the beginning of the period. Normally there will be discrepancies to the end of the period which cause actuarial gains or losses. The entity has to recognise them as of 1 Jan 2013 outside profit or loss through *other comprehensive income* (OCI).

[IAS 19 (revised 2008): The entity may recognise them both outside or inside profit or loss (IAS 19.92-95). In the latter case IAS 19.92-93 specifies: If the accumulated unrecognised actuarial gains or losses exceed 10 % of the maximum of the *defined benefit obligation* and the *fair value of plan assets* (10 % - corridor), a portion of that gain or loss is required to be recognised immediately as income or expense. The portion recognised is the excess divided by the *expected average remaining working lives of the participating employees.* However, an entity may adopt any systematic method that results in faster recognition of actuarial gains and losses, provided that the same basis is applied to both gains and losses and the basis is applied consistently from period to period (IAS 19.93).]

5. First-time adoption of IFRS

At the transition to the accounting according to IAS/IFRS it is binding to observe IFRS 1. Generally the *prospective method* will be preferred. This means that on the initial adoption of the standard all actuarial gains and losses that arose in earlier periods, may be recognised. The transition to IFRS requires a duration of two periods. On the *date of transition,* an opening IFRS balance sheet must be drawn up. At the end of the first period the *comparative information* has to be determined. All data calculated in the first period provide merely comparative information. Therefore the first IFRS financial statement can only be prepared and published at the end of the second period, the *reporting date.*