Notes to the balance sheet

Unless otherwise stated, the following notes on the balance sheet items as of December 31, 2024, relate to continuing operations and as of December 31, 2023, to continuing and discontinued operations. In this respect, comparability with the respective previous year-end figures is limited in some cases.

(13) PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is measured at cost of purchase and cost of production in accordance with IAS 16 (Property, Plant and Equipment). In addition to direct costs, production costs include directly attributable overheads.

If an asset necessarily takes at least two years to get ready for its intended use or sale, directly attributable borrowing costs are capitalized as production costs of the asset. If no direct reference can be made, the average cost of debt for the year under review is used. VAT incurred in connection with the acquisition or production of property, plant and equipment is only capitalized to the extent that the right to deduct input tax does not exist.

Subsequent costs are capitalized if the expenses increase the economic benefit of the item of property, plant and equipment and the costs can be reliably determined. Other repairs or maintenance, on the other hand, are generally recognized as expenses.

Components of an item of property, plant and equipment that are significant in relation to the total acquisition and production costs are recognized separately and depreciated on a straight-line basis over their useful life.

Investment grants are deducted directly from the acquisition and production costs of the subsidized assets.

Rights of use from leases

For rented and leased assets that fall under the scope of IFRS 16, a right-of-use asset (in accordance with IFRS 16.24) and a lease liability are recognized as soon as the assets are available for use by DB Group. Depreciation is recognized on a straight-line basis over the shorter of the useful life of the asset or the term of the lease. This does not apply to leases for low-value assets (up to and including € 5,000) and short-term leases with a term of up to 12 months, the expense thereof is recognized on a straight-line basis in the statement of income. Components of lease payments that do not relate to the use of the asset are not included in the measurement of the right-of-use asset and the lease liability.

Critical estimations and assessments

When determining the contract term, the management takes into account all facts and circumstances that have an influence on the possible exercise of an extension option or termination option. This assessment is reviewed regularly.

PROPERTY, PLANT AND EQUIPMENT / € million	Properties	Business, operations and other buildings	Permanent way structures and buildings along the rail lines	Track systems, track equipment and safety systems	Vehicles for passenger and freight transport	Machines and machinery systems	Other operating and business equipment	Advance payments made and assets under construction	Total
ACQUISITION AND PRODUCTION COSTS									
Status as of Jan 1, 2024	4,698	14,719	16,496	16,784	38,331	2,391	5,982	10,995	**110,396**
Changes in the scope of consolidation	0	0	–	–	0	0	9	0	**9**
thereof additions to scope of consolidation	–	–	–	–	0	–	9	0	**9**
thereof disposals from scope of consolidation	0	0	–	–	0	0	0	0	**0**
Additions	97	954	1,140	1,844	1,139	127	667	12,386	**18,354**
Additions to borrowing costs	–	–	–	–	–	–	–	106	**106**
Investment grants	0	-204	-392	-974	-15	-27	-74	-7,486	**-9,172**
Transfers	0	283	2,013	640	250	89	141	-3,420	**-4**
Reclassifications of non-current assets held for sale	-710	-4,437	-1	–	-1,177	-266	-975	-228	**-7,794**
Changes recognized directly in equity	–	0	0	0	–	–	–	–	**0**
Disposals	-31	-200	-12	-310	-819	-54	-425	41	**-1,810**
Currency translation effects	-2	-13	2	0	25	2	-3	0	**11**
Status as of Dec 31, 2024	**4,052**	**11,102**	**19,246**	**17,984**	**37,734**	**2,262**	**5,322**	**12,394**	**110,096**
ACCUMULATED DEPRECIATION									
Status as of Jan 1, 2024	-706	-7,084	-6,411	-13,121	-23,408	-1,626	-4,002	-1	**-56,359**
Changes in the scope of consolidation	0	0	–	–	0	0	0	–	**0**
thereof additions to scope of consolidation	–	–	–	–	–	–	–	–	**–**
thereof disposals from scope of consolidation	0	0	–	–	0	0	0	–	**0**
Depreciation	-34	-797	-242	-372	-1,560	-127	-538	0	**-3,670**
Impairments recognized	-2	-2	0	–	-3	-1	-1	0	**-9**
Impairments reversed	64	–	–	14	–	0	0	–	**78**
Transfers	–	3	-1	0	2	4	-6	-1	**1**
Reclassifications of non-current assets held for sale	159	2,447	0	–	761	161	693	0	**4,221**
Disposals	17	172	8	296	769	51	366	–	**1,679**
Currency translation effects	-1	8	-2	0	-16	-1	2	0	**-10**
Status as of Dec 31, 2024	**-503**	**-5,253**	**-6,648**	**-13,183**	**-23,455**	**-1,539**	**-3,486**	**-2**	**-54,069**
Carrying amount as of Dec 31, 2024	**3,549**	**5,849**	**12,598**	**4,801**	**14,279**	**723**	**1,836**	**12,392**	**56,027**
Carrying amount as of Dec 31, 2023	3,992	7,635	10,085	3,663	14,923	765	1,980	10,994	**54,037**

PROPERTY, PLANT AND EQUIPMENT / € million	Properties	Business, operations and other buildings	Permanent way structures and buildings along the rail lines	Track systems, track equipment and safety systems	Vehicles for passenger and freight transport	Machines and machinery systems	Other operating and business equipment	Advance payments made and assets under construction	Total
ACQUISITION AND PRODUCTION COSTS									
Status as of Jan 1, 2023	4,754	14,465	16,186	16,690	39,558	2,345	6,114	8,523	**108,635**
Changes in the scope of consolidation	0	-1	0	–	-4	0	–	0	**-5**
thereof additions to scope of consolidation	0	0	–	–	1	–	1	–	**2**
thereof disposals from scope of consolidation	0	-1	0	–	-5	0	-1	0	**-7**
Additions	154	983	818	1,563	2,132	112	635	10,350	**16,747**
Additions to borrowing costs	–	–	–	–	–	–	–	82	**82**
Investment grants	0	-219	-733	-1,436	-34	-38	-95	-6,728	**-9,283**
Transfers	16	232	245	236	390	65	130	-1,316	**-2**
Reclassifications of non-current assets held for sale	-203	-464	-11	-3	-2,997	-33	-358	-19	**-4,088**
Changes recognized directly in equity	–	0	–	–	–	–	–	–	**0**
Disposals	-24	-232	-11	-266	-742	-60	-429	102	**-1,662**
Currency translation effects	1	-45	2	0	28	0	-15	1	**-28**
Status as of Dec 31, 2023	**4,698**	**14,719**	**16,496**	**16,784**	**38,331**	**2,391**	**5,982**	**10,995**	**110,396**
ACCUMULATED AMORTIZATION									
Status as of Jan 1, 2023	-712	-6,579	-6,221	-13,062	-24,085	-1,570	-4,136	-2	**-56,367**
Changes in the scope of consolidation	0	0	0	–	3	0	–	–	**3**
thereof additions to scope of consolidation	–	0	–	–	0	–	-1	–	**-1**
thereof disposals from scope of consolidation	0	0	0	–	3	0	1	–	**4**
Depreciation	-50	-921	-206	-330	-1,756	-130	-531	–	**-3,924**
Impairments	-24	-13	0	-1	-17	-1	-1	–	**-57**
Reversals of impairment losses	–	4	0	16	0	0	0	–	**20**
Transfers	0	-1	0	1	1	-2	2	-1	**0**
Transfers of non-current assets held for sale	65	240	10	1	1,779	22	282	2	**2,401**
Disposals	14	162	7	254	691	55	373	–	**1,556**
Currency translation effects	1	24	-1	0	-24	0	9	0	**9**
Status as of Dec 31, 2023	**-706**	**-7,084**	**-6,411**	**-13,121**	**-23,408**	**-1,626**	**-4,002**	**-1**	**-56,359**
Carrying amount as of Dec 31, 2023	**3,992**	**7,635**	**10,085**	**3,663**	**14,923**	**765**	**1,980**	**10,994**	**54,037**
Carrying amount as of Dec 31, 2022	4,042	7,886	9,965	3,628	15,473	775	1,978	8,521	**52,268**

Leased assets

DB Group classifies every lease in which it is the lessor as either an operating lease or a finance lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership. If this is not the case, it is classified as an operating lease.

The additions to borrowing costs included an average cost of debt of 1.74% (previous year: 1.44%).

The impairment losses of € 9 million (previous year: € 57 million) mainly related to properties for passenger and freight transport.

Reversals of impairment losses of € 78 million (previous year: € 20 million) were mainly attributable to properties and track systems in the DB InfraGO segment (€ 64 million).

The book value disposals of assets under construction in 2024 included positive book value disposals in the amount of € 71 million (previous year: € 125 million). These resulted from the repayment of investment grants received in previous years and deducted from assets, because assets cannot be used as planned, for example.

If there are repayment risks for investment grants received, because there is uncertainty as to whether the grant conditions have been met in full as of the reporting date, for example, these are not offset against the subsidized property, plant and equipment, but deferred as liabilities.

Right-of-use assets from leases (IFRS 16)

Leases in DB Group are mainly for real estate. Compared to purchasing these assets, leasing offers significantly greater flexibility and less capital commitment. By regularly agreeing extension options, DB Group also participates in positive market developments. In addition, DB Group leases rolling stock in particular if the economic useful life significantly exceeds the term of the transport contract for which the rolling stock is intended.

Property, plant and equipment includes right-of-use assets from leases, which are shown separately in the following overview:

€ million	Rights of use to							
	Properties	Business, operating and other buildings	Permanent way structures and buildings on the rail track	Track systems, track equipment and safety systems	Driving vehicles for passenger and freight traffic	Machines and machines systems	Other operating and business equipment	Total
AS OF DEC 31, 2024								
Additions	39	521	1	6	249	11	30	**857**
Depreciation	- 31	- 572	- 1	- 1	- 179	- 25	- 22	**- 831**
Carrying amount	119	2,329	1	18	304	85	32	**2,888**
AS OF DEC 31, 2023								
Additions	25	625	1	0	187	11	39	**888**
Depreciation	- 40	- 679	- 1	- 1	- 246	- 30	- 21	**- 1,018**
Carrying amount	342	3,284	1	13	456	121	49	**4,266**

Further information on lease-related liabilities, expenses and other financial obligations can be found in the Notes (6) 242f., (7) 244, (9) 244, (28) 257ff. and (35) 277 as well as the "Notes to the cash flow statement" 229.

The decline in the carrying amounts for right-of-use assets resulted in particular from the reclassification of the former DB Schenker segment as a discontinued operation.

Leased assets

DB Group's leasing activities mainly relate to space in stations and the transfer of surplus locomotive and wagon capacity for use. Agreements to secure any residual values are not regularly concluded.

Subletting is carried out on a small scale. Storage space may be rented for the sole purpose of fulfilling a contract with a specific customer. If these customers assume the economic opportunities and risks relating to the rental space, the sublease income is not recognized in the statement of income, but is presented as a sub-financing lease. Income of € 33 million was generated from subletting (previous year: € 37 million).

The assets that are leased out for operating leases, some of which are determined on the basis of retrograde investigations and surveys carried out, have the following residual carrying amounts:

ASSETS LEASED OUT CLASSIFIED AS OPERATING LEASES / € million	Real estate	Mobile assets
Acquisition and production costs	1,365	7,351
Accumulated depreciation	- 507	- 4,953
Carrying amount as of Dec 31, 2024	**858**	**2,398**
Acquisition and production costs	1,246	7,040
Accumulated depreciation	- 420	- 4,932
Carrying amount as of Dec 31, 2023	**826**	**2,108**

Rental and lease payments are expected from the rental of assets in future years in accordance with the following overview:

FUTURE RENTAL AND LEASE PAYMENTS (NOMINAL VALUES) / € million	Residual maturity							
	Up to 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	Total more than 1 year	Total
AS OF DEC 31, 2024								
Minimum lease payment	365	190	144	132	117	302	**885**	**1,250**
AS OF DEC 31, 2023								
Minimum lease payment	359	193	147	131	119	393	**983**	**1,342**

(14) INTANGIBLE ASSETS

Acquired intangible assets are recognized at acquisition cost in accordance with IAS 38 (Intangible Assets). Internally generated intangible assets are recognized at cost if the recognition criteria are met and mainly relate to software.

The cost of sales mainly includes the cost of materials and services, wage and salary costs and attributable overheads.

Intangible assets (other than goodwill) are subsequently measured at acquisition and production cost less amortization and impairment losses plus reversals of impairment losses.

INTANGIBLE ASSETS / € million	Internally generated intangible assets 2024	Internally generated intangible assets 2023	Acquired intangible assets 2024	Acquired intangible assets 2023	Goodwill 2024	Goodwill 2023	Intangible assets under development and advance payments made 2024	Intangible assets under development and advance payments made 2023	Total 2024	Total 2023
ACQUISITION AND PRODUCTION COSTS										
As of Jan 1	1,188	987	1,718	2,321	1,735	2,956	401	483	**5,042**	**6,747**
Changes in the scope of consolidation	–	-13	-4	–	0	0	0	0	**-4**	**-13**
thereof additions to scope of consolidation	–	–	–	1	–	–	–	–	**–**	**1**
thereof disposals from scope of consolidation	–	-13	-4	-1	0	0	0	0	**-4**	**-14**
Additions	41	50	-3	87	–	–	250	210	**288**	**347**
Investment grants	–	-1	-1	-2	–	–	-45	-26	**-46**	**-29**
Reclassification	99	256	16	8	–	–	-111	-262	**4**	**2**
Reclassification of non-current assets held for sale	-347	-64	-284	-685	-1,211	-1,211	-27	-1	**-1,869**	**-1,961**
Disposals	-23	-28	-82	-18	0	0	0	-3	**-105**	**-49**
Currency translation effects	-1	1	0	7	4	-10	0	0	**3**	**-2**
As of Dec 31	**957**	**1,188**	**1,360**	**1,718**	**528**	**1,735**	**468**	**401**	**3,313**	**5,042**
ACCUMULATED AMORTIZATION										
As of Jan 1	-502	-465	-1,214	-1,744	-507	-1,684	–	0	**-2,223**	**-3,893**
Changes in the scope of consolidation	0	9	4	1	–	0	–	–	**4**	**10**
thereof additions to scope of consolidation	–	–	–	0	–	–	–	–	**–**	**0**
thereof disposals from scope of consolidation	0	9	4	1	–	0	–	–	**4**	**10**
Depreciation	-114	-115	-49	-77	–	–	–	–	**-163**	**-192**
Impairments recognized	–	0	–	0	–	-12	–	0	**–**	**-12**
Impairments reversed	–	–	–	–	–	–	–	–	**–**	**–**
Reclassification	–	–	-1	0	–	–	–	–	**-1**	**0**
Reclassification of non-current assets held for sale	140	50	214	597	17	1,212	–	0	**371**	**1,859**
Disposals	18	20	82	17	–	0	–	–	**100**	**37**
Currency translation effects	1	-1	-1	-8	-5	-23	–	–	**-5**	**-32**
As of Dec 31	**-457**	**-502**	**-965**	**-1,214**	**-495**	**-507**	**–**	**0**	**-1,917**	**-2,223**
Carrying amount as of Dec 31	**500**	**686**	**395**	**504**	**33**	**1,228**	**468**	**401**	**1,396**	**2,819**
Carrying amount as of Dec 31 of the previous year	686	522	504	577	1,228	1,272	401	483	**2,819**	**2,854**

The acquired intangible assets mainly included claims from capital expenditures made for a transport contract that are to be accounted for in accordance with IFRIC 12 (carrying amount as of December 31, 2024: € 397 million; as of December 31, 2023: € 406 million) and software (carrying amount as of December 31, 2024: € 67 million; as of December 31, 2023: € 74 million).

No impairment losses were recognized in the year under review (previous year: € 12 million in the DB InfraGO segment).

The allocation of reported goodwill to the segments can be found at Segment information 232f.

(15) INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Investments in associates and joint ventures are accounted for using the equity method in accordance with IAS 28. Based on the acquisition cost of DB Group at the time of acquisition, the carrying amount is adjusted in the amount of the change in equity attributable to DB Group's shares in the company accounted for using the equity method.

The shares in companies accounted for using the equity method developed as follows:

€ million	2024	2023
As of Jan 1	408	446
Additions	0	0
Disposals	-1	0
DB Group's share of the profit	13	11
Capital increase	–	1
Dividends received	-8	-7
Impairments	–	-4
Reclassifications	-2	0
Reclassification of non-current assets held for sale	-10	-42
Currency translation effects	0	0
Other valuations	2	3
As of Dec 31	**402**	**408**

The carrying amount as of December 31, 2024, was mainly attributable to the shares held in the associated company EUROFIMA European Company for the Financing of Railroad Rolling Stock, Basel/Switzerland. The shares in EUROFIMA are restricted in terms of their salability; new shareholders must be rail administrations that also require a guarantee from their respective state, which guarantees their obligations.

(16) DEFERRED TAXES

Deferred taxes are recognized in accordance with IAS 12 (Income Taxes).

An imputed income tax rate for corporations of 31.2% continues to be used to calculate deferred taxes for domestic companies. The income tax rate takes into account the corporation tax rate plus solidarity surcharge and an average trade tax rate. Foreign subsidiaries use the respective local tax rates for the calculation of deferred taxes.

A deferred claim is recognized in accordance with IAS 12.24 and IAS 12.34 if there are deferred liabilities.

Deferred taxes are calculated on the basis of the tax rates that are expected to apply to the period in which the deferred taxes are realized on the basis of existing or substantially enacted laws.

No deferred tax assets were recognized on the following loss carry-forwards and temporary differences, as it is not probable that future taxable profit will be available against which DB Group can utilize the deferred tax assets:

AS OF DEC 31 / € million	**2024**	2023
Loss carry-forwards for which no deferred taxes have been recognized [1]	26,231	24,395
Temporary differences for which no deferred taxes have been recognized [1]	1,630	2,062
Temporary differences that are subject to the recognition prohibition in accordance with IAS 12.24b in conjunction with 12.33	1,629	1,696
Total [1]	**29,490**	**28,153**

[1] Previous year's figure adjusted.

The loss carry-forwards for which no deferred taxes have been recognized are attributable to Germany at € 25,586 million.

As the law currently stands, the domestic loss carry-forwards can be deducted indefinitely in terms of their reason and amount.

The temporary differences that are subject to the recognition prohibition under IAS 12.33 relate exclusively to additional tax depreciation from tax-free investment grants received as part of the formation of DB AG.

The following recognized deferred tax assets and liabilities were attributable to recognition and measurement differences in the individual balance sheet items and to tax loss carry-forwards:

	Deferred tax assets		Deferred tax liabilities	
AS OF DEC 31 / € million	**2024**	2023	**2024**	2023
NON-CURRENT ASSETS				
Property, plant and equipment [1),2)]	519	371	1,459	1,367
Intangible assets [1),2)]	222	185	378	349
CURRENT ASSETS				
Trade receivables	0	9	1	4
Derivative financial instruments	130	104	0	0
NON-CURRENT LIABILITIES				
Leasing liabilities [1]	954	868	0	0
Derivative financial instruments [2]	0	0	266	259
Pension obligations [1),2)]	450	461	48	78
Other provisions [1]	17	75	3	86
CURRENT LIABILITIES				
Trade liabilities	3	63	0	0
Other liabilities	3	29	2	0
Other provisions [1]	4	26	0	0
Other [1]	0	211	113	0
Loss carry-forwards	11	284	0	0
Subtotal [1),2)]	**2,313**	**2,686**	**2,268**	**2,143**
Balancing [1),2),3)]	-2,261	-2,034	-2,261	-2,034
Amount stated in the balance sheet [1),2)]	**52**	**652**	**7**	**109**

[1] Previous year's figure adjusted for deferred tax assets; other netted.
[2] Previous year's figure for deferred tax liabilities adjusted; other netted.
[3] Where permitted in accordance with IAS 12 (Income Taxes).

Tax assets and liabilities are offset if they relate to the same tax authority, have matching maturities and concern the same taxable entity.

For the first time, all deferred tax assets and liabilities in Germany were reported in the balance sheet items shown above before offsetting, compared to the presentation of the surplus of deferred tax assets in the previous year. The previous year's figures have been adjusted accordingly.

No deferred tax liability was recognized on a temporary difference of € 197 million as of December 31, 2024 (as of December 31, 2023: € 238 million) in connection with shares in subsidiaries, as DB AG can determine the dividend policy and control the reversal of the temporary differences.

The deferred tax assets recognized in the balance sheet included deferred tax assets from recognition in equity in the amount of € 0 million (as of December 31, 2023: € 15 million) and deferred tax liabilities from recognition in equity in the amount of € 21 million (as of December 31, 2023: € 1 million).

(17) OTHER INVESTMENTS AND SECURITIES

Other investments are recognized at fair value insofar as the relevant information can be derived. Changes in fair value recognized directly in equity are shown in the "Fair value of securities and investments" reserve.

Non-current and current securities are recognized at fair value as of the balance sheet date – if available. Changes in fair value are recognized directly in equity in the reserve from the fair value measurement of securities.

Other investments and securities developed as follows:

	Other investments		Securities		**Total**	
€ million	**2024**	2023	**2024**	2023	**2024**	**2023**
As of Jan 1	61	132	520	504	**581**	**636**
Currency translation effects	0	0	–	0	**0**	**0**
Additions	5	6	514	67	**519**	**73**
Disposals through sale	-3	-3	-519	-50	**-522**	**-53**
Fair value changes	-19	-72	0	0	**-19**	**-72**
Reclassifications	2	0	0	-1	**2**	**-1**
Reclassification of non-current assets held for sale	-8	-2	-1	–	**-9**	**-2**
Other	–	0	–	–	**–**	**0**
As of Dec 31	**38**	**61**	**514**	**520**	**552**	**581**
thereof fair value (not recognized in profit or loss)	38	28	0	1	**38**	**29**
thereof fair value (recognized in profit or loss)	–	33	514	519	**514**	**552**
Non-current share	38	61	–	1	**38**	**62**
Current share	–	–	514	519	**514**	**519**

In 2024, there were fair value changes in other investments totaling € –19 million (previous year: € –72 million). At € –26 million (previous year: € –66 million), these related to the revaluation of the shares in Volocopter GmbH, Bruchsal. In December 2024, the company filed an application to open insolvency proceedings. A revaluation in the amount of € 14 million (previous year: none) related to European Energy Exchange AG, Leipzig.

The additions to other investments recognized at fair value related to Partium Inc., Philadelphia/USA, at € 3 million and Versorger-Allianz 450 Beteiligungs GmbH&Co. KG, Bonn, at € 2 million. The disposals by sale of € 3 million resulted in particular from the sale of the shares in Pecovasa Renfe Mercancias SA, Madrid/Spain.

The additions and disposals within securities mainly related to acquisitions and disposals of money market funds by DB AG. Money market funds are available on a daily basis and are as liquid as cash and cash equivalents; due to possible risks of changes in value, they are reported under other investments and securities.

(18) INVENTORIES

All costs directly related to the procurement process are capitalized as acquisition costs of inventories. The acquisition costs of fungible and homogeneous raw materials and supplies are determined on the basis of the average cost method. In addition to direct costs, production costs include directly attributable overheads; borrowing costs and idle capacity costs are not capitalized but expensed in the period in which they are incurred.

As of the balance sheet date, inventories are measured at the lower of cost and net realizable value.

CO_2 certificates are also reported under inventories.

Inventories break down as follows:

AS OF DEC 31 / € million	2024	2023
Raw materials and supplies	2,575	2,443
Work in progress, unfinished services	153	156
Finished products and goods	6	6
Advance payments made	4	0
Impairments	- 553	- 506
Total	**2,185**	**2,099**

(19) RECEIVABLES AND OTHER ASSETS

Receivables and other financial assets are generally measured at amortized cost. Receivables from finance leases, advance payments and plan assets in accordance with IAS 19 (Employee Benefits) are not allocated to any category of IFRS 9. For the measurement categories in accordance with IFRS 9, see Additional disclosures on financial instruments 276.

For trade receivables, DB Group applies the simplified approach in accordance with IFRS 9 to measure the risk provision for expected credit losses. Accordingly, the credit losses expected during the term are recognized for all trade receivables. For this purpose, trade receivables were initially allocated to different collectives on the basis of common credit risk characteristics. The expected credit losses were then determined on a collective basis using impairment rates that take into account historical data and country-specific forward-looking risk characteristics. As soon as there are indications of a credit loss for an individual debtor, the value adjustment is made on an individual basis.

For receivables from financing and other financial receivables and contractual assets, DB Group applies the general approach in accordance with IFRS 9 to measure expected credit losses. An individual impairment loss is recognized for receivables for which there is objective evidence of impairment.

The fair values of receivables and other assets, trade receivables and other receivables and assets essentially correspond to the carrying amounts.

Value adjustments are deducted from the financial assets on the assets side. If the reasons for impairment no longer exist, the impairment loss is reversed. DB Group continuously monitors the maturities of receivables and default risks.

Some transport contracts provide for an obligation to hand over the assets used and owned by DB Group at the end of the contract. Other transport contracts include the leasing of the assets used from the ordering organization or the issuing of debt service guarantees by the ordering parties for leasing from independent financial service providers. In accordance with IFRIC 12 (Service Concession Arrangements), the corresponding capital expenditures are capitalized as receivables from transport concessions, separating the guaranteed residual values at the end of the contract. These receivables are repaid from the concession fees, meaning that not all of the concession fees lead to revenues. Residual value receivables are reported at present value under receivables from financing.

Obligations and claims from independent acknowledgments of debt are reported in the balance sheet. The obligations correspond to receivables of the same amount from supply contracts, secured by bank guarantees in the event of a claim.

Critical estimations and assessments

The calculation of expected credit losses includes estimates and assessments based to a large extent on the creditworthiness of the respective customer, current economic developments and the analysis of historical bad debts on a portfolio basis. Insofar as the provision for expected credit losses is derived from historical default rates on a portfolio basis, a decline in the volume of receivables leads to a corresponding reduction in such provisions and vice versa.

Receivables and other assets included the following in detail:

€ million	Trade receivables	Financial receivables and earmarked bank deposits	Receivables from transport concessions	Advance payments made	Other assets	Total
AS OF DEC 31, 2024						
Gross value	3,303	854	1,306	111	2,022	**7,596**
Impairments	- 82	0	–	–	- 33	**- 115**
Net value	**3,221**	**854**	**1,306**	**111**	**1,989**	**7,481**
thereof to related parties and persons	44	0	–	–	251	**295**
AS OF DEC 31, 2023						
Gross value	5,614	1,106	895	269	2,382	**10,266**
Impairments	- 143	0	–	–	- 35	**- 178**
Net value	**5,471**	**1,106**	**895**	**269**	**2,347**	**10,088**
thereof to related parties and persons	50	2	–	–	180	**232**

Financial receivables and earmarked bank deposits as of December 31, 2024, included residual values of € 547 million (as of December 31, 2023: € 532 million) agreed with the authorities responsible for transport contracts. These residual value receivables mainly relate to rail vehicles that are sold at the end of the transport contract to the transport authority or a third party designated by the operator at a fixed price. In addition, finance lease receivables of € 96 million (as of December 31, 2023: € 322 million) and cash collateral in the form of credit support agreements (CSAs) of € 185 million (as of December 31, 2023: € 228 million) were reported under financial receivables and restricted bank deposits.

Other assets included contract fulfillment costs of € 16 million as of December 31, 2024 (as of December 31, 2023: € 1 million).

The valuation allowances recognized for receivables and other assets classified in accordance with IFRS 7 developed as follows:

€ million	Trade receivables	Financial receivables and earmarked bank deposits	Receivables from transport concessions	Other assets	Total
Status as of Jan 1, 2024	-143	0	–	-35	**-178**
Additions	-25	–	–	-5	**-30**
Disposals	28	–	–	3	**31**
Amounts used	4	–	–	1	**5**
Reclassifications to current assets	55	–	–	4	**59**
Changes in the scope of consolidation	–	–	–	–	**–**
Currency translation effects	-1	–	–	-1	**-2**
Status as of Dec 31, 2024	**-82**	**0**	**–**	**-33**	**-115**
Status as of Jan 1, 2023	-163	-10	–	-43	**-216**
Additions	-32	–	–	-6	**-38**
Disposals	30	10	–	1	**41**
Amounts used	14	–	–	1	**15**
Reclassifications to current assets	7	0	–	12	**19**
Changes in the scope of consolidation	0	–	–	0	**0**
Currency translation effects	1	–	–	0	**1**
Status as of Dec 31, 2023	**-143**	**0**	**–**	**-35**	**-178**

The reclassifications to current assets in the amount of € 59 million related to impairment losses of the discontinued operation in 2024.

Expenses for the complete derecognition of receivables and other assets fell to € 58 million in 2024 (previous year: € 78 million).

Income from payments received on derecognized receivables and other assets amounted to € 5 million (previous year: € 2 million).

The expected credit losses determined on a collective basis amounted to € 13 million as of December 31, 2024 (as of December 31, 2023: € 25 million):

AS OF DEC 31, 2024 / € million	Net carrying amount	Expected loss rate (%)	Risk provisioning	thereof risk provisioning for overdue receivables	thereof risk provisioning for non-overdue receivables
Trade receivables	3,221	0.40	13	11	2

As of December 31, 2024, a risk provision of € 2 million was recognized for receivables from financing, other financial receivables and contractual assets (as of December 31, 2023: € 5 million).

The following overview shows the residual maturity structure of the receivables for the financial instruments classified in accordance with IFRS 7 and the advance payments made:

€ million	Residual maturity							
	Up to 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	Total more than 1 year	Total
AS OF DEC 31, 2024								
Trade receivables	3,198	10	4	7	2	0	**23**	**3,221**
Financial receivables and earmarked bank deposits	218	8	8	33	7	580	**636**	**854**
Receivables from transport concessions	159	152	145	142	132	576	**1,147**	**1,306**
Advance payments	58	53	–	–	–	–	**53**	**111**
Other assets	1,261	552	30	3	111	32	**728**	**1,989**
Total	**4,894**	**775**	**187**	**185**	**252**	**1,188**	**2,587**	**7,481**
thereof non-financial assets	501	554	12	2	107	16	**691**	**1,192**
AS OF DEC 31, 2023								
Trade receivables	5,447	5	11	4	3	1	**24**	**5,471**
Financial receivables and earmarked bank deposits	377	58	46	27	18	580	**729**	**1,106**
Receivables from transport concessions	90	84	85	83	83	470	**805**	**895**
Advance payments	208	61	–	–	–	–	**61**	**269**
Other assets	1,657	157	255	158	101	19	**690**	**2,347**
Total	**7,779**	**365**	**397**	**272**	**205**	**1,070**	**2,309**	**10,088**
thereof non-financial assets	775	165	226	149	100	15	**655**	**1,430**

Trade receivables (excluding discontinued operations) increased slightly compared to the end of the previous year. The increase in the DB Regional segment was partially offset by declines in the other segments.

The increase in other assets (excluding discontinued operations) resulted from almost all segments.

Due to the large number of customers in the respective operating segments, there was no concentration of credit risks in trade receivables.

The maximum default risk essentially corresponded to the carrying amount in each case. Collateral is not regularly held.

As of December 31, 2024, there were no indications that the debtors of the receivables that were neither impaired nor overdue would not meet their payment obligations.

(20) INCOME TAX RECEIVABLES

Income tax receivables related in particular to creditable capital gains taxes in Germany.

(21) DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial instruments are generally classified as hedging instruments to hedge cash flows (cash flow hedges) and changes in value (fair value hedges) from contractual obligations or expected business transactions when the contract is concluded.

Cash flow hedges

Cash flow hedges are used to hedge fluctuations in the cash flows of financial assets or liabilities or expected business transactions. When hedging future cash flows, the hedging instruments are also measured at fair value. Changes in valuation are initially recognized in other comprehensive income and are only recognized in the statement of income when the corresponding losses or gains from the underlying transaction are recognized in profit or loss or the transactions expire. Any ineffectiveness is recognized in the statement of income in accordance with IFRS 9.

Fair value hedges

Fair value hedges are used to hedge recognized assets or liabilities against the risk of a change in fair value. The results from the hedging instruments are reported in the item of the consolidated statement of income in which the hedged item is also shown.

Derivative financial instruments that do not meet the requirements for hedge accounting in accordance with IFRS 9 (non-hedges)

If hedging transactions that are used to hedge interest rates, currencies or prices do not meet the requirements of IFRS 9 for hedge accounting, the changes in fair value are recognized immediately in the statement of income.

Determination of the fair value

The fair value of financial instruments that are traded on an active market is based on the market price on the balance sheet date. Standard valuation methods such as option price or present value models are used to determine the fair value of financial instruments that are not traded in an active market. If parameters relevant to valuation cannot be observed directly on the market, forecasts are used that are based on comparable financial instruments traded on an active market, which are provided with premiums or discounts based on historical data. The average of the bid and ask price is used. DB AG generally conducts its business with long-term financial derivatives on a collateralized basis and does not adjust the fair value of collateralized transactions for credit risk. No credit risk adjustment is made for short-term derivatives for reasons of materiality. If a credit risk adjustment is made, the discounts to be applied are derived from the credit default swap (CDS) values observable on the market.

All derivatives used in DB Group are measured using standard methods such as option pricing or present value models, as their fair values are not traded in an active market. No parameters from unobservable markets are used for the valuation.

The volume of derivative financial instruments concluded is shown in the following overview of nominal values:

AS OF DEC 31 / € million	Nominal values of the hedging instrument 2024	2023	Residual maturity up to 1 year 2024	2023	Residual maturity more than 1 year 2024	2023
INTEREST-BASED TRANSACTIONS						
Interest rate swaps [1]	1,400	1,400	–	–	–	1,400
	1,400	**1,400**	**–**	**–**	**–**	**1,400**
FOREIGN EXCHANGE-BASED TRANSACTIONS						
Foreign exchange swaps [2]	194	331	194	331	–	0
Foreign exchange forwards [3]	1,277	1,789	1,217	1,683	60	106
Cross-currency interest rate swaps [2]	7,556	0	818	–	6,738	–
Cross-currency interest rate swaps [3]	371	8,677	–	773	371	7,904
	9,398	**10,797**	**2,229**	**2,787**	**7,169**	**8,010**

[1] Fair value hedges.
[2] Cash flow hedges.
[3] Non-hedges.

AS OF DEC 31	Volume 2024	2023	Residual maturity up to 1 year 2024	2023	Residual maturity more than 1 year 2024	2023
OTHER TRANSACTIONS						
Diesel [1] (1,000 t)	144	335	73	80	71	255
Coal [1] (1,000 t)	1,128	1,428	744	840	384	588
Gas [2] (GWh)	5,440	–	2,824	–	2,616	–
Electricity [2] (GWh)	14,261	–	9,036	–	5,225	–

[1] Cash flow hedges.
[2] Non-hedges.

No new interest rate swaps were concluded in 2024 to hedge interest rate risks; accordingly, the portfolio as of December 31, 2024, remained unchanged at € 1,400 million. The changes in the holdings of foreign exchange swaps and forwards vary with the corresponding hedging requirements of DB Group's subsidiaries. The nominal value of the cross-currency interest rate swaps decreased by a total of € 750 million as of December 31, 2024 (as of December 31, 2023: decrease of € 248 million), as effects from expired transactions exceeded the effects from new transactions.

The volume of diesel hedges fell, in particular as a result of the sale of DB Arriva. The stock of coal hedges also decreased as of December 31, 2024, and amounted to 1.1 million t as of December 31, 2024 (as of December 31, 2023: 1.4 million t).

In 2024, electricity and gas forward transactions were reported for the first time due to the change in the classification of structuring activities at DB Energy. The portfolio of gas futures amounted to 5,440 GWh as of December 31, 2024, while electricity futures amounted to 14,261 GWh as of December 31, 2024.

The following table shows the average hedge prices/hedging rates of the main derivative hedging instruments (cash flow hedges and fair value hedges) of DB Group per currency in 2024:

	Hedging price per 1,000 t		Hedging rate		
CURRENCY	Diesel	Coal	Cross-currency swaps (CCS)	Interest rate swaps (IRS)	Foreign exchange swaps
EUR	639.46	103.54	–	0.02	–
USD	–	–	–	–	1.12
GBP	601.40	–	0.87	–	–
CHF	–	–	1.08	–	–
NOK	–	–	9.38	–	–
SEK	–	–	10.18	–	–
AUD	–	–	1.57	–	–
SGD	–	–	–	–	1.43
PLN	2,733.87	–	–	–	–
RON	–	–	–	–	5.00

In principle, all derivative financial instruments are subject to market valuation on the reporting date. The following overview shows the breakdown of the balance sheet disclosure according to the type of underlying hedging transaction:

	Assets		Liabilities	
AS OF DEC 31 / € million	2024	2023	2024	2023
INTEREST-BASED TRANSACTIONS				
Interest rate swaps	16	14	26	43
Interest forwards	0	–	–	–
	16	**14**	**26**	**43**
FOREIGN EXCHANGE-BASED TRANSACTIONS				
Foreign exchange swaps	8	0	–	2
Foreign exchange forwards	11	12	4	9
Other foreign exchange derivatives	–	0	–	0
Cross-currency interest rate swaps	780	762	395	303
thereof effects from foreign exchange rate hedges	516	583	409	361
	799	**774**	**399**	**314**
OTHER TRANSACTIONS				
Energy price derivatives	162	11	107	75
Other miscellaneous derivatives	–	–	0	0
	162	**11**	**107**	**75**
Total	**977**	**799**	**532**	**432**
Non-current share	798	679	376	336
Interest-based transactions	16	14	26	43
Foreign exchange-based transactions	737	658	314	262
Other transactions	45	7	36	31
Current share	179	120	156	96

Cash flow hedges

To minimize the interest rate and exchange rate risk, both foreign currency issues and intra-Group foreign currency loans are generally converted into euros, and variable-interest financial liabilities are generally converted into fixed-interest financial liabilities. Energy price hedging was used to reduce price fluctuations in energy procurement.

The performance of the cross-currency interest rate swaps in 2024 resulted from the expiry of transactions and the development of interest rates in the individual currencies (in particular the Swiss franc and the euro) as well as the depreciation of the euro against the British pound. The appreciation of the euro against the Swiss franc, the Norwegian krone and the Australian dollar had a partially offsetting effect.

The market valuation of energy price derivatives reflected developments on the underlying commodity markets.

The fair values of cash flow hedges are reported as follows under assets and liabilities:

	Assets		Liabilities	
AS OF DEC 31 / € million	2024	2023	2024	2023
FOREIGN EXCHANGE-BASED TRANSACTIONS				
Foreign exchange swaps	8	0	–	2
Cross-currency interest rate swaps [1]	768	755	373	279
	776	**755**	**373**	**281**
OTHER TRANSACTIONS				
Energy price derivatives	11	3	6	66
	11	**3**	**6**	**66**
Total [1]	**787**	**758**	**379**	**347**
Non-current share [1]	728	652	293	258
Foreign exchange-based transactions [1]	722	651	292	236
Other transactions	6	1	1	22
Current share	59	106	86	89

[1] Previous year's figures adjusted.

The cash flow hedges are not assigned to any category of IFRS 9.

The hedged cash flows of the underlying transactions are expected to occur in the years 2025 to 2072 (interest and principal payments) and in the years 2025 to 2027 (payments for energy) and will be recognized in profit or loss.

The underlying and hedging transactions and the hedge reserve for cash flow hedges developed as follows:

€ million	For the period from Jan 1, 2024 to Dec 31, 2024			As of Dec 31, 2024	For the period from Jan 1 to Dec 31, 2023			As of Dec 31, 2023
	Change in hedging and basic transactions	Change of the basic transaction	thereof ineffective (with impact on income statement)	Status of hedging reserve cash-flow hedges	Change in hedging and basic transactions	Change of the basic transactions	thereof ineffective (with impact on income statement)	Status of hedging reserve cash-flow hedges
FOREIGN EXCHANGE-BASED TRANSACTIONS								
Foreign exchange swaps [1]	+8	+8	–	–	-2	-2	–	+1
Cross-currency interest rate swaps [1]	+292	+211	+45	+254	+562	+379	-39	+150
OTHER TRANSACTIONS								
Energy price hedging [1]	+5	+5	–	+5	-62	-62	–	-66

[1] Previous year's figures adjusted.

In the case of interest rate and cross-currency interest rate hedges, the effectiveness of the hedging relationship is checked using the critical terms match method. This is applied because all material valuation parameters of the underlying and hedging transactions are identical. Ineffectiveness is determined on each balance sheet date by applying the hypothetical derivative method. With this method, the performance of the hedge actually concluded is compared with the performance of a fictitious hedge in which all valuation-relevant parameters match the underlying transaction. In the case of energy price derivatives, the effectiveness of the hedging relationship is checked using linear regression. Ineffectiveness is determined using the dollar offset method. The fair value changes of the underlying transaction are compared with the fair value changes of the hedging instrument. The quotient calculated from this determines the ineffectiveness. The main causes of ineffectiveness in cross-currency interest rate swaps are cross-currency basis spreads and the redesignation of novated transactions. The conditions including the cash flows of the cross-currency interest rate swaps remained unchanged with the novation, meaning that the economic hedge is still in place. Ineffectiveness from energy derivatives arises from basis risks, as consumption does not correspond exactly to the products tradable on the hedging market.

As in the previous year, the ineffectiveness from cash flow hedges of energy price derivatives recognized in profit or loss was insignificant in 2024.

Fair value hedge derivatives

The fair values are reported under assets and liabilities as follows:

AS OF DEC 31 / € million	Assets 2024	Assets 2023	Liabilities 2024	Liabilities 2023
INTEREST-BASED TRANSACTIONS				
Interest rate swaps	16	14	26	43
Total	**16**	**14**	**26**	**43**
Non-current share	16	14	26	43
Interest-based transactions	16	14	26	43
Current share	–	–	–	–

The interest rate swaps were used to hedge senior bonds issued (reported in the balance sheet item Financial debt 228) with a nominal value of € 1,400 million. The effectiveness of the hedging relationship was tested using the critical terms match method. In the year under review, there was still no ineffectiveness.

The overall decline in interest rate swaps is due to a generally lower interest rate level in the Eurozone compared to the end of the previous year.

Non-hedge derivatives

Foreign exchange forwards used to hedge the operating business are generally classified as non-hedge derivatives.

The fair values of the non-hedge derivatives are reported under assets and liabilities as follows:

AS OF DEC 31 / € million	Assets 2024	Assets 2023	Liabilities 2024	Liabilities 2023
FOREIGN EXCHANGE-BASED TRANSACTIONS				
Foreign exchange forwards	11	12	4	9
Other foreign exchange derivatives	–	0	–	0
Cross-currency interest rate swaps [1]	12	7	22	24
	23	**19**	**26**	**33**
OTHER TRANSACTIONS				
Energy price derivatives	151	8	101	9
	151	**8**	**101**	**9**
Total [1]	**174**	**27**	**127**	**42**
Non-current share [1]	54	13	57	35
Foreign exchange-based transactions [1]	15	7	22	26
Other transactions	39	6	35	9
Current share	120	14	70	7

[1] Previous year's figures adjusted.

The cross-currency interest rate swaps relate exclusively to hedges for internal foreign currency loans, which economically hedge the currency and interest rate risks of the underlying transactions, but cannot be shown in hedge accounting.

At the end of the previous year, the energy price derivatives related exclusively to diesel swaps that were concluded externally by DB AG and passed on to companies in the discontinued operation DB Arriva. As of December 31, 2024, electricity and gas futures transactions that are exclusively attributable to DB Energy are reported here.

As of December 31, 2024, electricity futures concluded to hedge DB Group's long-term electricity requirements are recognized for the first time in the balance sheet as financial derivatives at fair value (financial derivatives with a positive market value: € 151 million; financial derivatives with a negative market value: € 101 million), as they do not meet the formal requirements of IFRS 9 for non-recognition. Changes in value are recognized in the statement of income under other operating income (Note (3) 240f.) or other operating expenses (Note (7) 244).

The non-hedge derivatives are assigned to the category "Held for trading" in IFRS 9.

(22) CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash in hand and checks, bank deposits with daily maturities and fixed-term deposits with a term of up to three months.

Cash and cash equivalents are recognized at nominal value (at amortized cost).

Cash and cash equivalents included:

AS OF DEC 31 / € million	2024	2023
Bank deposits / cash in hand	4,170	2,631
Cash equivalents	0	0
Total	**4,170**	**2,631**

The interest rates for short-term bank deposits in 2024 were in a corridor between 2.50% and 4.08% (previous year: between 1.81% and 4.08%) and resulted from cash investments in euros. The terms of the investments range from one day to three months.

For the definition of cash and cash equivalents, see Notes to the statement of cash flows 270f.).

(23) ASSETS HELD FOR SALE AND LIABILITIES IN CONNECTION WITH ASSETS HELD FOR SALE

Assets and liabilities associated with these assets are classified as assets and liabilities held for sale in accordance with IFRS 5 if their carrying amount is to be realized through sale and not through continued use. This may relate to an individual asset, a disposal group or a division of a company. Non-current assets held for sale are measured at the lower of carrying amount and fair value less costs to sell.

Non-current assets held for sale and liabilities in connection with assets held for sale developed as follows:

€ million	Jan 1, 2024	Disposal	Addition	Dec 31, 2024
Property, plant and equipment	1,362	-1,362	3,868	3,868
Intangible assets	81	-81	1,555	1,555
Investments accounted for using the equity method	32	-32	9	9
Available for sale financial assets	2	-2	9	9
Inventories	68	-68	9	9
Receivables and other assets	1,299	-1,299	3,861	3,861
Derivative financial instruments	0	0	1	1
Cash and cash equivalents	445	-445	1,146	1,146
Deferred tax assets	17	-17	166	166
Assets	**3,306**	**-3,306**	**10,624**	**10,624**
Financial debt	536	-536	1,728	1,728
Other liabilities	1,011	-1,011	3,883	3,883
Derivative financial instruments	0	0	2	2
Pension obligations	47	-47	124	124
Other provisions	224	-224	360	360
Deferred income	243	-243	26	26
Deferred tax liabilities	96	-96	76	76
Liabilities	**2,157**	**-2,157**	**6,199**	**6,199**

The balance sheet disclosure as of December 31, 2024, related to the discontinued operation DB Schenker and one company from the DB Cargo segment. The disposals resulted from the completed sale of the remaining subsidiaries of DB Arriva.

(24) SUBSCRIBED CAPITAL

The share capital of DB AG amounts to € 2,150 million. It is divided into 430,000,000 no-par-value bearer shares. All shares are held by the Federal Government.

(25) RESERVES

a) Capital reserves

The capital reserves are reserves that were not part of the profit. In the 2024 Federal budget, the Federal Government has earmarked € 4.375 billion in addition to the funds from the 2030 Climate Action Program (in the year under review: € 1.125 billion) to increase DB AG's equity for the preservation of the rail infrastructure. The disbursement of the equity funds totaling € 5.500 billion was made on June 27, 2024, and November 15, 2024. The funds will be used exclusively for capital expenditures in rail infrastructure and were passed on to DB InfraGO AG to increase its equity.

b) Reserve from measurement recognized directly in equity

RESERVE FOR CURRENCY TRANSLATION DIFFERENCES

The currency translation effects resulting from the functional currency method (IAS 21) are reported separately as a component of consolidated equity.

RESERVE FOR THE FAIR VALUE MEASUREMENT OF SECURITIES AND INVESTMENTS

The reserve includes changes in the fair value of financial instruments recognized directly in equity. The reserve must be reversed through profit or loss upon the sale, maturity or reclassification of a financial instrument or, if it is an equity instrument, derecognized.

RESERVE FROM THE FAIR VALUE MEASUREMENT OF CASH FLOW HEDGES

The development of the reserve is shown below:

€ million	2024	2023
As of Jan 1	89	188
Change in fair value	-19	-31
Hedging results reclassified to the carrying amount of the acquired inventories during the year	-1	-28
RECLASSIFICATIONS		
Financial result	168	-93
Net interest income	0	-3
Cost of materials	26	49
Change in deferred taxes	-4	7
As of Dec 31	**259**	**89**

RESERVE FOR THE REVALUATION OF PENSIONS

The effects resulting from the remeasurement of defined benefit plans in accordance with IAS 19 (Employee Benefits) are recognized in other comprehensive income.

OTHER CHANGES IN RESERVES

This item mainly includes amounts resulting from transactions relating to reductions or increases in non-controlling interests between the shareholders of DB AG and the non-controlling interests.

(26) GENERATED PROFITS

Generated profits include the total net profit generated since January 1, 1994, less the goodwill offset under HGB up to December 31, 2002, and the dividends paid to the shareholder.

This item also includes the effects on equity from the first-time application of IFRS, insofar as they do not fall under reserves from measurement recognized directly in equity.

(27) HYBRID CAPITAL AND NON-CONTROLLING INTERESTS

In October 2019, Deutsche Bahn Finance GmbH (DB Finance) issued two subordinated hybrid bonds with a total volume of € 2 billion. The hybrid bonds have unlimited terms with a first right of termination for the issuer after 5.5 years (coupon: 0.95%) and ten years (coupon: 1.6%); the issue proceeds amounted to € 997 million and € 995 million. The two bonds do not provide for any repayment obligation or right of termination in favor of the creditors. In addition, any retained interest payments may not have to be made until a dividend is paid. In accordance with IAS 32 (Financial Instruments: Presentation), the hybrid bonds are therefore to be classified in full as equity, as there is neither a regular repayment obligation for the hybrid bonds nor a right of termination for the bondholders. Interest payments to be made to bondholders are recognized directly in equity, net of taxes on income. In the year under review, interest payments of € 25 million were made (previous year: € 25 million).

Non-controlling interests included the share of third parties in the net assets of consolidated subsidiaries. Minority interests in the currency reserve amounted to € –24 million (as of December 31, 2023: € –24 million).

(28) FINANCIAL DEBT

In accordance with IFRS 9, financial debt and other non-current liabilities are initially measured at fair value, taking into account transaction costs and premiums/discounts. Subsequently, they are recognized at amortized cost using the effective interest method. The differences between the disbursement amount less transaction costs and the repayment amount are recognized in profit or loss over the term.

Interest-free loans granted in connection with capital expenditures in infrastructure are recognized at the present value of the repayment amounts and compounded over the term to their nominal repayment amount. The difference between the nominal loan amount and the present value is recognized as an interest benefit granted under deferred income. Income from the pro rata temporis reversal of these deferred income items is recognized as other operating income.

Liabilities from leases for which a right of use must be recognized in accordance with IFRS 16 are recognized as liabilities at the present value of the following lease payments: fixed payments less payments received from the lessor, variable payments based on an index, expected payments for residual value guarantees, the purchase price for purchase options that are likely to be exercised, probable compensation payments in the event of early termination. The measurement of the lease liability also includes lease payments due to the reasonably certain utilization of extension options. The leasing installments are divided into an interest portion and a repayment portion. The interest portion of the lease payment is recognized as an expense in the statement of income. The interest rate used corresponds to the implicit interest rate of the lease or, if this is not known, the term-dependent incremental borrowing rate. Lease liabilities are not allocated to any of the IFRS 9 categories.

Some transport contracts include the leasing of rail vehicles in particular from contracting organizations or independent financial service providers, whereby these receive a debt service guarantee, a replacement guarantee or similar from the operating authority. The present value of these payment obligations is reported under financial liabilities from transport concessions.

All interest-bearing liabilities, including interest-free loans recognized at present value (fully repaid as of December 31, 2024), are reported under financial debt. Financial debt has the following residual maturity structure:

€ million	Residual maturity Up to 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	Total more than 1 year	Total
AS OF DEC 31, 2024								
Interest-free loans	–	–	–	–	–	–	**–**	**–**
Senior bonds	1,979	2,261	2,806	2,091	1,786	18,217	**27,161**	**29,140**
Commercial paper	1,503	–	–	–	–	–	**–**	**1,503**
Bank borrowings	582	2,500	500	–	60	–	**3,060**	**3,642**
Leasing liabilities	541	405	361	314	277	1,227	**2,584**	**3,125**
Financing liabilities from transport concessions	90	84	79	77	67	217	**524**	**614**
Other financial liabilities	98	0	0	0	0	1	**1**	**99**
Total	**4,793**	**5,250**	**3,746**	**2,482**	**2,190**	**19,662**	**33,330**	**38,123**
thereof to related parties and persons	0	–	–	–	–	–	**–**	**0**
AS OF DEC 31, 2023								
Interest-free loans	152	–	–	–	–	–	**–**	**152**
Senior bonds	1,966	1,973	2,216	2,801	2,101	18,985	**28,076**	**30,042**
Commercial paper	358	–	–	–	–	–	**–**	**358**
Bank borrowings	566	8	2,000	–	–	–	**2,008**	**2,574**
Leasing liabilities	1,052	788	610	470	361	1,506	**3,735**	**4,787**
Financing liabilities from transport concessions	21	21	20	19	18	52	**130**	**151**
Other financial liabilities	22	0	0	21	0	1	**22**	**44**
Total	**4,137**	**2,790**	**4,846**	**3,311**	**2,480**	**20,544**	**33,971**	**38,108**
thereof to related parties and persons	153	–	–	–	–	–	**–**	**153**

In comparison to the carrying amounts, the fair values are summarized as follows:

AS OF DEC 31 / € million	2024 Carrying amount	2024 Fair value	2023 Carrying amount	2023 Fair value
Interest-free loans	–	–	152	152
Senior bonds	29,140	26,675	30,042	27,306
Commercial paper	1,503	1,503	358	358
Bank borrowings	3,642	3,642	2,574	2,574
Leasing liabilities	3,125	3,011	4,787	4,323
Financing liabilities from transport concessions	614	611	151	144
Other financial liabilities	99	99	44	44
Total	**38,123**	**35,541**	**38,108**	**34,901**

The differences between the carrying amounts and the fair values of the financial debt are due to the mostly changed market interest rates for financial debt with a comparable risk profile. The other financial liabilities do not show any material differences between the carrying amounts and the fair values due to short maturities and, consequently, interest rates close to the market.

The interest-free loans resulted almost exclusively from financing provided by the Federal Government for capital expenditures in the expansion and replacement of rail lines. The basis for this is the responsibility for the transport needs of the general public enshrined in the German Basic Law (Article 87e Para. 4 GG) and specified in the Federal Rail Infrastructure Development Act (Bundesschienenwegeausbaugesetz; BSWAG). They were fully repaid as of December 31, 2024.

The repayment of the loans is regulated in individual and collective financing agreements. The loans are usually repaid in equal annual installments, the amount of which is based on the corresponding annual depreciation amounts of the financed assets.

Interest-free loans developed as follows:

€ million	2024	2023
As of Jan 1	152	298
Redemption	- 155	- 155
Compounding	3	9
As of Dec 31	**0**	**152**

The senior bonds issued break down as follows as of the balance sheet date:

SENIOR BONDS AS OF DEC 31 / € million	Issue volume	Issue currency	Residual maturity (years)	Effective interest rate (%)	2024 Carrying amount	2024 Fair value	2023 Carrying amount	2023 Fair value
UNLISTED SENIOR BONDS								
DB Finance	829	AUD, JPY, EUR	2.4–7.8		784	741	1,141	1,086
Total					**784**	**741**	**1,141**	**1,086**
LISTED SENIOR BONDS ISSUED BY DB FINANCE								
Bond 2010–2025	500	EUR	0.5	3.870	500	502	499	505
Bond 2012–2024	83	CHF	0.0	1.586	–	–	108	108
Bond 2012–2024	500	EUR	0.0	3.119	–	–	500	499
Bond 2012–2072	75	GBP	47.9	4.524	72	56	69	64
Bond 2013–2028	50	EUR	3.1	2.707	50	50	50	49
Bond 2013–2025	202	NOK	0.2	4.017	127	127	133	133
Bond 2013–2026	497	GBP	1.6	3.351	511	501	486	477
Bond 2014–2024	59	AUD	0.0	5.395	–	–	55	55
Bond 2014–2024	246	CHF	0.0	1.522	–	–	324	324
Bond 2014–2029	500	EUR	4.2	2.886	497	503	497	501
Bond 2015–2025	600	EUR	0.8	1.391	599	594	599	584
Bond 2015–2030	366	NOK	5.8	2.760	288	260	302	287
Bond 2015–2025	115	AUD	0.8	3,864	107	106	110	109
Bond 2015–2030	650	EUR	5.8	1.707	647	609	647	602
Bond 2015–2025	161	CHF	0.9	0.143	186	185	189	184
Bond 2016–2026	500	EUR	1.2	0.880	499	490	499	478
Bond 2016–2031	750	EUR	6.5	0.964	745	664	745	653
Bond 2016–2028	500	EUR	3.7	0.765	497	467	497	455
Bond 2016–2024	41	HKD	0.0	2.100	–	–	41	40
Bond 2017–2032	79	NOK	7.1	2.514	59	52	62	58
Bond 2017–2032	500	EUR	7.9	1.541	498	453	498	450
Bond 2017–2025	341	GBP	0.5	1.437	362	355	345	329
Bond 2017–2032	55	SEK	7.6	2.226	46	42	48	43
Bond 2017–2030	261	CHF	5.9	0.463	318	316	324	305
Bond 2017–2024	300	EUR	0.0	FRN	–	–	300	301
Bond 2018–2027	1,000	EUR	3.0	1.086	998	959	997	935
Bond 2018–2033	750	EUR	8.6	1.680	747	678	746	664
Bond 2018–2028	346	CHF	3.5	0.470	426	425	433	417
Bond 2018–2031	500	EUR	6.2	1.508	496	461	495	454
Bond 2018–2043	125	EUR	18.9	1.866	125	95	125	96
Bond 2019–2028	1,000	EUR	4.0	1.235	996	944	995	927
Bond 2019–2026	340	GBP	1.1	1.944	362	351	345	329
Bond 2019–2034	103	NOK	9.1	2.732	84	73	89	83
Bond 2019–2029	310	CHF	4.5	0.135	371	364	377	354
Bond 2019–2034	133	CHF	9.5	0.516	159	155	162	148
Bond 2019–2039	47	SEK	14.4	2.025	44	35	45	37
Bond 2020–2035	500	EUR	10.5	0.819	497	394	496	384
Bond 2020–2024	300	EUR	0.0	-0.062	–	–	300	299
Bond 2020–2032	150	EUR	7.2	0.257	150	124	150	121
Bond 2020–2027	900	EUR	2.3	0.639	897	861	896	839
Bond 2020–2040	750	EUR	15.3	1.433	744	567	744	574
Bond 2020–2029	850	EUR	4.5	0.411	849	766	848	755
Bond 2020–2039	650	EUR	14.5	0.977	641	463	640	467
Bond 2020–2035	48	SEK	10.5	1.544	44	36	45	37
Bond 2020–2050	1,000	EUR	25.9	0.656	993	526	992	550
Bond 2021–2036	370	CHF	11.1	0.100	426	390	433	373
Bond 2021–2026	339	GBP	1.9	0.523	361	335	344	312
Bond 2021–2026	494	SEK	1.1	0.524	436	425	450	423
Bond 2021–2036	1,000	EUR	11.3	0.759	986	764	984	745
Bond 2021–2033	296	CHF	8.4	0.211	345	330	351	315
Bond 2021–2041	168	AUD	16.4	3.124	155	110	159	112
Bond 2021–2051	1,000	EUR	26.4	1.159	992	601	992	628
Bond 2021–2036	196	NOK	11.5	2.241	169	133	177	154
Bond 2021–2031	750	EUR	6.7	0.393	748	636	748	622
Bond 2021–2031	279	CHF	6.8	0.241	319	309	324	298
Bond 2022–2042	191	AUD	17.0	3.350	178	129	184	133
Bond 2022–2027	200	EUR	2.1	0.791	200	193	200	189
Bond 2022–2034	750	EUR	9.2	1.389	747	653	747	641
Bond 2022–2030	900	EUR	5.4	1.992	893	859	892	850
Bond 2022–2040	52	SEK	15.7	3.511	48	48	49	49
Bond 2022–2032	308	CHF	7.7	1.903	319	349	324	340
Bond 2022–2034	51	NOK	9.7	4.370	42	41	44	48
Bond 2022–2042	500	EUR	17.8	3.924	495	525	495	538

SENIOR BONDS AS OF DEC 31 / € million	Issue volume	Issue currency	Residual maturity (years)	Effective interest rate (%)	2024 Carrying amount	2024 Fair value	2023 Carrying amount	2023 Fair value
Bond 2022–2042	151	CHF	17.9	2.285	159	193	161	187
Bond 2023–2037	750	EUR	13.0	3.664	747	779	747	781
Bond 2023–2033	600	EUR	8.4	3.413	593	613	592	618
Bond 2023–2035	287	CHF	10.7	1.927	291	323	296	314
Bond 2023–2027	600	EUR	2.7	3.590	599	616	598	617
Bond 2023–2033	149	AUD	8.9	6.053	149	157	153	163
Bond 2023–2043	650	EUR	18.9	4.140	638	694	639	707
Bond 2024–2038	500	EUR	13.1	3.512	493	504	–	–
Bond 2024–2039	1,325	NOK	14.1	4.136	112	106	–	–
Bond 2024–2034	500	EUR	9.3	3.425	498	512	–	–
Total					**28,369**	**25,934**	**28,930**	**26,220**
Adjustment from derivatives					–13	–	–29	–
Total amount of senior bonds					**29,140**	**26,675**	**30,042**	**27,306**

In 2024, two fixed-interest unlisted senior bonds of AUD 425 million (€ 285 million) and JPY 12,000 million (€ 100 million) and six fixed-interest listed senior bonds of DB Finance of CHF 100 million (€ 83 million), € 500 million, AUD 90 million (€ 59 million), CHF 300 million (€ 246 million), HKD 350 million (€ 41 million) and € 300 million as well as a floating-rate listed senior bond of € 300 million with a total value of € 1,914 million were redeemed as scheduled.

In 2024, DB Finance issued three fixed-interest listed senior bonds with a total value of € 1,117 million. These are two issues of € 500 million each and one issue of NOK 1,325 million (€ 117 million). Some of the fixed-interest euro bonds were swapped for floating-rate bonds. This resulted in a decrease in the carrying amounts of the bond portfolio by € 13 million (as of December 31, 2023: € 29 million).

Commercial paper issues were made as part of short-term liquidity management. As of December 31, 2024, commercial paper in the amount of € 1,503 million was outstanding (as of December 31, 2023: € 358 million). They are made up as follows:

COMMERCIAL PAPER ISSUES AS OF DEC 31 / € million	Issue volume	Issue currency	Residual maturity (days)	Nominal interest rate (%)	2024 Carrying amount	2024 Fair value	2023 Carrying amount	2023 Fair value
December 28, 2024	215	EUR	13	3.050	214.7	214.7	–	–
December 28, 2024	215	EUR	13	3.050	214.7	214.7	–	–
December 28, 2024	215	EUR	13	3.050	214.7	214.7	–	–
December 28, 2024	215	EUR	13	3.050	214.7	214.7	–	–
December 28, 2024	215	EUR	13	3.050	214.7	214.7	–	–
December 28, 2024	215	EUR	13	3.050	214.7	214.7	–	–
December 28, 2024	215	EUR	13	3.050	214.7	214.7	–	–
December 11, 2023	54	USD	0	5.552	–	–	48	48
December 11, 2023	60	EUR	0	3.940	–	–	60	60
December 11, 2023	50	EUR	0	3.940	–	–	50	50
December 11, 2023	50	EUR	0	3.940	–	–	50	50
December 11, 2023	50	EUR	0	3.940	–	–	50	50
December 11, 2023	50	EUR	0	3.940	–	–	50	50
December 11, 2023	50	EUR	0	3.940	–	–	50	50
Total	**1,869**				**1,503**	**1,503**	**358**	**358**

Bank borrowings are shown in detail in the following table:

BANK BORROWINGS AS OF DEC 31 / € million	Currency	Residual maturity (years)	Nominal interest rate (%)	2024 Carrying amount	2024 Fair value	2023 Carrying amount	2023 Fair value
Bank loan 2023–2026	EUR	1.5	variable	500	500	500	500
Bank loan 2023–2026	EUR	1.5	variable	500	500	500	500
Bank loan 2023–2026	EUR	1.9	variable	500	500	500	500
Bank loan 2023–2026	EUR	1.9	variable	500	500	500	500
Bank loan 2024–2027	EUR	2.0	variable	500	500	–	–
Bank loan 2024–2026	EUR	1.9	variable	500	500	–	–
Other				642	642	574	574
Total				**3,642**	**3,642**	**2,574**	**2,574**

The increase in bank borrowings as of December 31, 2024, was mainly the result of taking out two additional bank loans as bridge financing in anticipation of the cash inflow from the proceeds of a sale.

Other bank borrowings mainly included collateral due in the short term (as of December 31, 2024: € 574 million; as of December 31, 2023: € 524 million), which resulted from hedging agreements as part of derivative transactions.

Liabilities are generally not collateralized in DB Group.

DB Group had access to further guaranteed credit facilities with a total volume of € 4,695 million as of December 31, 2024 (as of December 31, 2023: € 4,797 million). Of this, € 2,050 million was attributable to back-up lines for DB AG's € 3.0 billion commercial paper program (as of December 31, 2023: € 2,100 million). None of these back-up lines had been utilized as of December 31, 2024. Global credit facilities totaling € 2,645 million (as of December 31, 2023: € 2,697 million) are used for working capital and guarantee financing for the globally active subsidiaries, primarily in the former DB Schenker segment.

Obligations from leases (Note (13) 246ff.) are secured by the lessor's rights to the leased assets. The leased assets had a carrying amount of € 2,888 million as of December 31, 2024 (as of December 31, 2023: € 4,266 million).

The nominal values of the lease liabilities are distributed as follows:

LEASING LIABILITIES / € million	Residual maturity							
	Up to 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	Total more than 1 year	Total
AS OF DEC 31, 2024								
Nominal values of lease payments	548	473	418	361	315	1,478	**3,045**	**3,593**
AS OF DEC 31, 2023								
Nominal values of lease payments	1,064	885	686	532	408	1,828	**4,339**	**5,403**

The decline in the nominal value of lease liabilities was mainly due to the reclassification of DB Schenker as a discontinued operation.

The financing liabilities from transport concessions in accordance with IFRIC 12 are shown in detail in the following overview:

AS OF DEC 31 / € million	Currency	Residual maturity (years)	2024 Carrying amount	2024 Fair value	2023 Carrying amount	2023 Fair value
Network 3b Gäu-Murr electric multiple units (2017)	EUR	1.0	4	4	–	–
Network 9a Breisgau East-West electric multiple units (2019)	EUR	8.0	55	51	–	–
Network 4 Rhine Valley Lot 1 Electric multiple units (2020)	EUR	8.0	68	65	–	–
Network 4 Rhine Valley Lot 2 electric multiple units (2020)	EUR	8.0	56	53	–	–
Diesel network Allgäu Diesel multiple units (2020)	EUR	5.0	26	26	30	30
Nuremberg S-Bahn electric multiple units (2020)	EUR	6.0	46	46	53	52
S-Bahn Rhine-Neckar electric multiple units (2020)	EUR	10.0	96	90	8	7
S-Bahn Rhine-Neckar electric multiple units (2021)	EUR	10.0	51	48	56	51
Karlsruhe network 7b Lot 1 electric multiple units (2022)	EUR	11.0	51	54	–	–
Karlsruhe network 7b lot 2 electric multiple units (2022)	EUR	14.0	25	27	–	–
Taunusnetze hydrogen multiple units (2022)	EUR	10.0	86	94	–	–
S-Bahn Rhein-Ruhr Lot B Electric multiple units (2023)	EUR	4.0	42	44	–	–
Network 54 Regionalbahn Bodensee-Oberschwaben diesel multiple units (2023)	EUR	9.0	8	9	–	–
Other	EUR		–	–	4	4
Total			**614**	**611**	**151**	**144**

Various multiple units were leased from the responsible contracting organizations to provide local rail passenger transport services. In 2024, various existing contracts were included in the financing liabilities from transport concessions for the first time or in full. This resulted from an adjusted assessment of the accounting treatment of the contracts concerned.

Financing liabilities from transport concessions are offset by receivables from transport concessions (Note (19) 251ff.

The fair values of non-current financial liabilities are allocated to the following measurement hierarchies:

AS OF DEC 31 / € million	2024 Level 1	2024 Level 2	2024 Level 3	2024 Total	2023 Level 1	2023 Level 2	2023 Level 3	2023 Total
FINANCIAL LIABILITIES – NON-CURRENT								
Interest-free loans	–	–	–	**–**	–	–	–	**–**
Senior bonds	–	24,706	–	**24,706**	3,036	22,310	–	**25,346**
Commercial paper	–	–	–	**–**	–	–	–	**–**
Bank borrowings	–	3,060	–	**3,060**	–	2,008	–	**2,008**
Leasing liabilities	–	2,470	–	**2,470**	–	3,271	–	**3,271**
Financing liabilities from transport concessions	–	521	–	**521**	–	123	–	**123**
Other financial liabilities	–	1	–	**1**	–	22	–	**22**
Total	**–**	**30,758**	**–**	**30,758**	**3,036**	**27,734**	**–**	**30,770**

The interest-free loans recognized at amortized cost at the end of the previous year are calculated by discounting the nominal values of the interest-free loans, which are divided into residual maturity slices, using the DB yield curve (market yield curve plus current DB spread; source: Thomson Reuters or Bloomberg).

DB Finance senior bonds were allocated to Level 2 as the market activity does not meet the requirements of an active market. The fair values of these senior bonds were determined on the basis of binding offers from sources including Thomson Reuters and Bloomberg, which were verified using the valuation models, taking into account parameters observable on the market such as yield curves and exchange rates.

The fair value of the leases and the financing liabilities from transport concessions was determined by discounting the outstanding lease installments using the DB yield curve (market yield curve plus current spread; source: Thomson Reuters and Bloomberg).

(29) LIABILITIES

In accordance with IFRS 9, liabilities are initially measured at fair value, taking into account transaction costs and premiums/discounts. Subsequently, non-current liabilities are recognized at amortized cost using the effective interest method. The differences between the disbursement amount less transaction costs and the repayment amount are recognized in profit or loss over the term.

The fair values of the balance sheet items other liabilities, trade payables and other liabilities essentially correspond to the carrying amounts.

Severance package commitments for agreements made as of the balance sheet date are recognized as other liabilities and – if they are not yet included in individual agreements and if they are part of a restructuring commitment in accordance with IAS 37 – are stated as other provisions.

Liabilities developed as follows:

	Residual maturity							
€ million	Up to 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	Total more than 1 year	Total
AS OF DEC 31, 2024								
Trade liabilities including advance payments received	3,457	29	32	17	8	9	**95**	**3,552**
Miscellaneous and other liabilities	3,283	503	19	16	20	332	**890**	**4,173**
Total	**6,740**	**532**	**51**	**33**	**28**	**341**	**985**	**7,725**
thereof non-financial liabilities	1,646	7	5	3	1	3	**19**	**1,665**
thereof advance payments received	92	2	2	2	1	2	**9**	**101**
thereof to related parties	499	–	–	–	–	–	–	**499**
AS OF DEC 31, 2023								
Trade liabilities including advance payments received	6,224	38	18	43	10	6	**115**	**6,339**
Miscellaneous and other liabilities	3,998	96	242	164	17	352	**871**	**4,869**
Total	**10,222**	**134**	**260**	**207**	**27**	**358**	**986**	**11,208**
thereof non-financial liabilities	2,281	6	3	3	2	3	**17**	**2,298**
thereof advance payments received	90	2	2	2	1	3	**10**	**100**
thereof to related parties	237	–	–	–	–	–	–	**237**

The slight decrease in trade liabilities overall (excluding discontinued operations) was attributable to the DB Long-Distance segment with € 157 million and to the DB Regional segment with € 138 million; in contrast, the DB InfraGO segment recorded an increase of € 263 million. Miscellaneous and other liabilities increased in the DB InfraGO (€ +285 million), DB Regional (€ +190 million) and DB Long-Distance (€ +107 million) segments and decreased in the Subsidiaries/Other segment (€ −109 million). For further information, please refer to Segment information 232f.

Non-financial liabilities and advance payments received are not allocated to any category under IFRS 9.

The miscellaneous and other liabilities related in detail to:

AS OF DEC 31 / € million	2024	2023
PERSONNEL-RELATED LIABILITIES		
Liabilities for vacation entitlements	224	302
Outstanding overtime liabilities	336	297
Liabilities within the framework of social security	11	101
Liabilities for severance payments	72	56
Liabilities for Christmas bonus	1	6
Liabilities for vacation pay	8	23
Other personnel obligations	725	1,120
OTHER TAXES		
Value-added tax	12	43
Wage and church tax, solidarity surcharge	143	178
Miscellaneous other taxes	33	72
Interest payables	216	199
Revenue reductions	46	50
Deferred investment grants	517	273
Independent acknowledgments of debt issued for delivery transactions	627	537
Liabilities pursuant to the Railway Crossing Act	2	2
Miscellaneous liabilities	1,200	1,610
Total	**4,173**	**4,869**

As of December 31, 2024, the liabilities were still secured with € 0 million.

Within other liabilities, obligations from independent acknowledgments of debt in the amount of € 627 million (as of December 31, 2023: € 537 million) were recognized in the balance sheet, which have been paid out in full to the suppliers. In 2024 there were additions (€ +172 million) and disposals (€ –82 million) due to incoming and outgoing payments. The average payment term was two to three years.

(30) INCOME TAX LIABILITIES

As of December 31, 2024, income tax liabilities continued to relate in particular to obligations to the tax authorities in Germany and Canada.

GRI

(31) PENSION OBLIGATIONS

DB Group grants post-employment benefits to its employees in numerous countries. The structure of the pension commitments depends on the legal, economic and tax conditions of the respective country.

DB Group has both defined benefit and defined contribution pension schemes. Defined benefit obligations are measured and recognized in accordance with IAS 19. Significant pension obligations only exist in Germany and the United Kingdom. For this reason, only these are described in more detail below.

Germany

DB Group's pension obligations in Germany include those for both civil servants and employees.

Civil servants assigned to DB Group companies receive retirement benefits from Federal Railway Fund (Bundeseisenbahnvermögen; BEV) in accordance with the Civil Servants' Pension Act after retirement.

Payments are only made to the BEV during the active employment of the assigned civil servants for DB Group as part of the as-if settlement as for newly hired employees (Section 21 (1) DBGrG). This also includes notional shares for statutory pension insurance contributions and notional expenses in accordance with the collective agreements on the supplementary company pension scheme (ZversTV) and the company pension scheme (bAV-TV) for DB AG employees. The payments to the BEV for the retirement benefits of civil servants are defined contribution pension plans.

The pension obligations with regard to employees mainly relate to the following:

a) Employees who were employed by Deutsche Bundesbahn before DB AG was established (January 1, 1994) enjoy supplementary benefits in view of their former membership of the public sector. The employees are entitled to benefits from this additional pension insurance from Deutsche Rentenversicherung Knappschaft-Bahn-See (KBS). As an official authority, KBS has not only assumed responsibility for managing and paying the statutory pension for DB Group employees; it also continues the additional pension insurance for the transferred employees who are beneficiaries.

During the active phase of the employment agreement, a pro forma refund of expenses is also provided to the BEV for these employees. When the employees retire, this payment is no longer made to the BEV.

The BEV bears the costs of these additional benefits, less the contribution made by the employees themselves (Section 14 (2) DBGrG). Accordingly, DB AG does not set aside any provisions for these public sector benefits.

b) Employees of the former Deutsche Reichsbahn and employees who were recruited after January 1, 1994, and before December 31, 2021, receive an additional company pension from DB AG within the framework of the ZVersTV. This supplementary company pension is a defined benefit scheme, which is linked to salary and length of service. The current pension benefits are adjusted every year in line with the regulations of the Company Pensions Act (Betriebsrentengesetz). Retirement benefits, invalidity benefits and benefits to surviving dependents are provided in the form of a lifetime pension. No plan assets are created for this scheme.

In addition, the employees in most Group companies receive a monthly contribution to the company pension plan in the amount of 3.3 % of the employee's monthly standard salary as well as of most of the salary elements paid in the month. The monthly contribution is paid into a pension plan (DEVK-Pensionsfonds). It is not necessary for provisions to be created for this purpose.

c) Various defined benefit pension obligations exist with regard to executives in DB Group who were granted an executive commitment before January 1, 2007. The extent of the benefits depend on the length of service and the salary of the beneficiary. In general, retirement benefits, invalidity benefits and benefits to surviving dependents are provided in the form of a lifetime pension. With the exception of a small number of reinsurance policies, there are no plan assets.

d) Managers of DB Group who received a management commitment after December 31, 2006, are generally granted a pension in the form of a defined contribution plan. For this purpose, a benefit module is calculated in each year of service, depending on the salary and age of the beneficiaries. These benefits are financed by way of a contractual trust arrangement (CTA), namely Deutsche Bahn Pension Trust e.V. The extent of the benefits depends on the yield of the CTA, whereby a minimum return is guaranteed (guarantees up to and including 2014: 2.25 % p.a.; guarantees from 2015 onwards: only maintenance of contribution). Longevity risks are avoided by the fact that the benefits are generally granted in the form of a five-year installment payment. The assets of the CTA are classified as plan assets. The pension obligation is covered by the plan assets on the assumption that the CTA produces a corresponding performance, thus minimizing investment risks. There are no legal or regulatory obligations requiring Deutsche Bahn Pension Trust e.V. to make minimum payments into the scheme. The contributions are invested in line with the fundamental assumption that the benefit commitment is guaranteed by a corresponding guarantee element. For each payment relating to an individual beneficiary, an age-related amount is invested in prime zero bonds. The investment amount remaining after the payment has been made into the guarantee element is mainly invested in passively managed European equity and bond funds (or equivalent products) with the aim of optimizing returns.

e) Executives are able to participate in a deferred compensation program. This employee-financed form of company pension plan constitutes a defined benefit obligation.

United Kingdom

The company pension scheme of DB Cargo (UK) Holdings Limited is essentially a defined benefit pension plan (linked to salary and length of service) within the British Railway Pension Scheme. The plan assets are managed by an independent trustee. The process of collating the data of members in the plan for the purpose of compliance with legal requirements in relation to the members of the plan is generally carried out every three years. As of the intermediate valuation dates, the obligations in the plan are measured on the basis of the correspondingly updated data. The pension plan is based on final salary, and lifetime pensions are provided as benefits. The pension obligations are covered by plan assets. Investments are made by the trustee of the plan assets in coordination with DB Group.

Critical estimations and assessments

In the case of the defined benefit pension obligations in Germany and abroad, the actuarial risks are borne by DB Group. Actuarial methods have been used for measuring defined benefit pension commitments as well as benefit commitments which are similar to pensions and the resultant expenses and income. The valuations are based on actuarial assumptions. There are the following actuarial risks which are considered to be typical for companies with defined benefit schemes:

- ***Interest risk:** The discount factors which are used reflect the interest rates (giving due consideration to the duration of the underlying obligation) which are achieved on the balance sheet date for high-quality fixed-interest senior bonds with a corresponding duration. A change in the discount rate results in a change in the present value of the total obligation (DBO).*
- ***Inflation risk:** Part of the pension obligations, particularly as a result of adjustments to current pensions, is linked to the development of inflation.*
- ***Longevity risk:** A longevity risk may occur in the form of extended periods in which pensions are paid out as a result of an increase in life expectancy in future.*
- ***Investment risk:** In the case of externally financed pension plans, the values of the corresponding plan assets or the refund claims are based on the fair values as of the balance sheet date. The capital investment is exposed to numerous risks, which may have an impact on the present value recognized for the plan assets. In the case of pension schemes with an obligation to pay into the scheme, the amount of future contributions may be affected by the investment risk.*

Key assumptions for expenses and income attributable to pension commitments and benefit commitments similar to pensions are to some extent based on current market conditions. Expenses and income relating to pension commitments and benefit commitments similar to pensions may change as a result of changes to these underlying key assumptions.

The figures stated for pension provisions in the balance sheet are detailed in the following table:

	Germany		Europe (excluding Germany)		Rest of world		**Total**	
AS OF DEC 31 / € million	**2024**	2023	**2024**	2023	**2024**	2023	**2024**	**2023**
Commitments for funded benefits	383	581	1,380	1,653	0	38	**1,763**	**2,272**
Commitments for unfunded benefits	3,241	3,308	9	50	0	13	**3,250**	**3,371**
Total obligations	**3,624**	**3,889**	**1,389**	**1,703**	**0**	**51**	**5,013**	**5,643**
Fair value of the plan assets	-320	-555	-1,477	-1,723	–	-32	**-1,797**	**-2,310**
Effects due to cost sharing	–	–	-4	-6	–	–	**-4**	**-6**
Amount not recognized as an asset as a result of the IAS 19.64 restriction	0	54	–	–	–	–	**0**	**54**
Asset recorded on the balance sheet as receivables from plan assets	–	–	106	111	–	–	**106**	**111**
Net obligations recognized in the balance sheet	**3,304**	**3,388**	**14**	**85**	**0**	**19**	**3,318**	**3,492**

The total pension commitment has developed as follows:

	Germany		Europe (excluding Germany)		Rest of world		**Total**	
€ million	**2024**	2023	**2024**	2023	**2024**	2023	**2024**	**2023**
Commitments as of Jan 1	3,889	3,121	1,703	4,001	51	51	**5,643**	**7,173**
Service cost, excluding employee contributions	137	117	15	36	3	2	**155**	**155**
Employee contributions	3	3	10	24	0	1	**13**	**28**
Interest expense	124	123	75	162	2	2	**201**	**287**
Payments	-112	-108	-101	-178	-3	-4	**-216**	**-290**
thereof pension payments	-112	-108	-101	-178	-3	-4	**-216**	**-290**
thereof payments for settlements	0	–	–	–	–	–	**0**	**-**
Past service costs and profit or losses from settlements	5	5	-14	-3	–	0	**-9**	**2**
Transfers	-237	181	-180	-2,541	-52	0	**-469**	**-2,360**
Changes in the scope of consolidation	0	–	0	0	–	–	**0**	**0**
thereof additions to scope of consolidation	0	–	–	–	–	–	**0**	**-**
thereof disposals from scope of consolidation	–	–	0	0	–	–	**0**	**0**
Actuarial gains (-)/losses (+)	-185	447	-224	116	-1	–	**-410**	**563**
from revaluations based on experience	-80	-2	16	95	0	-4	**-64**	**89**
from changes in demographic assumptions	2	-4	-1	-48	0	1	**1**	**-51**
from changes in financial assumptions	-107	453	-239	69	-1	3	**-347**	**525**
Exchange rate effects	–	–	105	86	0	-1	**105**	**85**
Scope of commitments as of Dec 31	**3,624**	**3,889**	**1,389**	**1,703**	**0**	**51**	**5,013**	**5,643**

The transfers related to the reclassification of pension provisions of the former DB Schenker segment (previous year: former DB Arriva segment) to liabilities in connection with assets held for sale as a result of the planned sale.

The development of the plan assets is detailed in the following overview:

	Germany		Europe (excluding Germany)		Rest of world		**Total**	
€ million	**2024**	2023	**2024**	2023	**2024**	2023	**2024**	**2023**
Fair value of plan assets as of Jan 1	555	271	1,723	3,949	32	33	**2,310**	**4,253**
Employer contributions	42	37	15	73	1	2	**58**	**112**
Employee contributions	0	0	10	24	0	0	**10**	**24**
Notional return from plan assets	20	17	80	165	1	1	**101**	**183**
Payments	- 18	- 18	- 96	- 171	- 2	- 3	**- 116**	**- 192**
thereof pension payments	- 18	- 18	- 96	- 171	- 2	- 3	**- 116**	**- 192**
thereof payments for settlements	–	–	–	–	–	–	**–**	**–**
Transfers	- 275	236	- 122	- 2,468	- 35	0	**- 432**	**- 2,232**
Changes in the scope of consolidation	–	–	0	–	–	–	**0**	**–**
Revaluation	- 4	12	- 240	75	3	0	**- 241**	**87**
Administrative costs: costs of pension assurance	–	–	- 3	- 8	0	- 1	**- 3**	**- 9**
Exchange rate effects	–	–	110	84	0	0	**110**	**84**
Present value of plan assets as of Dec 31	**320**	**555**	**1,477**	**1,723**	**0**	**32**	**1,797**	**2,310**

The transfers related almost exclusively to plan assets relating to the former DB Schenker segment (previous year: the former DB Arriva segment).

The reported plan assets are broken down as follows:

	Germany		Europe (excluding Germany)		Rest of world		**Total**	
AS OF DEC 31 / € million	**2024**	2023	**2024**	2023	**2024**	2023	**2024**	**2023**
Stocks and other securities	35	24	396	377	–	8	**431**	**409**
thereof with market price listing	35	24	396	377	–	8	**431**	**409**
Interest-bearing securities	196	190	979	1,190	–	22	**1,175**	**1,402**
thereof with market price listing	196	190	979	1,190	–	22	**1,175**	**1,402**
Reinsurance	46	66	18	98	–	–	**64**	**164**
thereof with market price listing	–	66	18	91	–	–	**18**	**157**
thereof without market price listing	46	–	–	7	–	–	**46**	**7**
Private equity	–	–	74	76	–	–	**74**	**76**
thereof without market price listing	–	–	74	76	–	–	**74**	**76**
Investments in infrastructure	–	–	–	1	–	–	**–**	**1**
thereof with market price listing	–	–	–	1	–	–	**–**	**1**
Cash and other assets	43	275	10	- 19	0	2	**53**	**258**
thereof with market price listing	43	41	10	- 28	0	0	**53**	**13**
thereof without market price listing	–	234	–	9	–	2	**–**	**245**
	320	**555**	**1,477**	**1,723**	**0**	**32**	**1,797**	**2,310**
thereof assets recorded as receivables from plan assets	–	–	- 106	- 111	–	0	**- 106**	**- 111**
	320	**555**	**1,371**	**1,612**	**0**	**32**	**1,691**	**2,199**

Changes in the net pension provisions are detailed in the following:

€ million	Germany 2024	Germany 2023	Europe (excluding Germany) 2024	Europe (excluding Germany) 2023	Rest of world 2024	Rest of world 2023	Total 2024	Total 2023
Provision as of Jan 1	3,388	2,850	85	102	19	18	**3,492**	**2,970**
Pension expenses	251	232	-2	38	4	5	**253**	**275**
thereof service cost	137	117	15	36	3	2	**155**	**155**
thereof employee contributions	3	2	–	–	0	1	**3**	**3**
thereof interest income and interest expenses	106	108	-6	-3	1	1	**101**	**106**
thereof administrative expenses	–	–	3	8	0	1	**3**	**9**
thereof past service costs and profits or losses from settlements	5	5	-14	-3	–	0	**-9**	**2**
Employer contributions	-42	-36	-15	-73	-1	-2	**-58**	**-111**
Payments	-94	-90	-4	-7	-1	-1	**-99**	**-98**
thereof pension payments	-94	-90	-4	-7	-1	-1	**-99**	**-98**
thereof payments for settlements	0	–	–	–	0	–	**0**	**–**
Transfers	-29	5	-58	11	-17	0	**-104**	**16**
Changes in the scope of consolidation	0	–	0	0	–	–	**0**	**0**
thereof additions to scope of consolidation	0	–	–	–	–	–	**0**	**–**
thereof disposals from scope of consolidation	–	–	0	0	–	–	**0**	**0**
Revaluation	-170	427	19	21	-4	0	**-155**	**448**
from revaluations based on experience	-80	-2	16	65	0	-4	**-64**	**59**
from changes in demographic assumptions	2	-4	-1	-37	0	0	**1**	**-41**
from changes in financial assumptions	-107	453	-237	54	-1	3	**-345**	**510**
Difference between actual income and theoretical income from plan assets	4	-12	241	-61	-3	1	**242**	**-72**
Changes to the asset value limit	11	-8	–	0	–	–	**11**	**-8**
Exchange rate effects	–	–	0	2	0	-1	**0**	**1**
Change in recognized assets	–	–	-11	-9	0	–	**-11**	**-9**
Provision as of Dec 31	**3,304**	**3,388**	**14**	**85**	**0**	**19**	**3,318**	**3,492**

The actuarial parameters used for assessing the value of most of the pension provision are set out in the following:

%	2024	2023
INTEREST RATE		
Germany and rest of world (excluding the United Kingdom)	3.40	3.20
United Kingdom	5.40	4.50
EXPECTED RATE OF SALARY INCREASES		
Germany and rest of world (excluding the United Kingdom)	4.10	4.10
United Kingdom	3.20	3.10
EXPECTED PENSION TREND (DEPENDING ON THE GROUP OF PEOPLE)		
Germany and rest of world (excluding the United Kingdom)	2.25	2.25
United Kingdom	2.20	2.10

The 2018 G mortality tables by Prof. Dr. Klaus Heubeck were used unchanged to measure the pension obligations for the German Group companies. Country- or benefit-scheme-specific mortality tables have been used for valuing the pension obligations of the other Group companies.

Sensitivities and additional information:

AS OF DEC 31 / € million	2024	2023
Total obligation with a 1 percentage point higher interest rate	4,376	4,905
Total obligation with a 1 percentage point lower interest rate	5,823	6,578
Total obligation with a 0.5% higher salary increase	5,024	5,667
Total obligation with a 0.5% higher pension development	5,278	5,930
Total obligation in the event of a 1-year increased life expectancy	5,140	5,792
Total obligations	5,013	5,644
thereof active beneficiaries	2,225	2,504
thereof former employees	688	798
thereof pensioners	2,100	2,341
Expected payments into the plan assets for next year	52	63
Direct pension payments for next year	130	128
Duration of benefit obligation (years)	14.8	15.4

The sensitivity figures have been established using the method which was used for calculating the extent of the commitment. One assumption was modified while the other assumptions were retained, which means that interdependencies between the individual assumptions were disregarded.

(32) OTHER PROVISIONS

Other provisions are recognized if a legal or constructive commitment exists as a result of a past event, the probability of its utilization is greater than 50 % and it will lead to an outflow of resources, and if a reliable estimate of the extent of the commitment can be made (IAS 37 Provisions, Contingent Liabilities and Contingent Assets).

Non-current provisions are discounted using market interest rates. Provisions for environmental protection for the rehabilitation of existing ecological damage are discounted on the basis of real interest rates, which are adjusted to reflect the risk and the period until fulfillment. The difference between the nominal value of the expected outflows and the present value recognized for the provisions for environmental protection of DB AG for transferred liabilities for the elimination of existing damage from the time previous to the foundation of DB AG is stated under deferred items, and represents the interest benefit resulting from the longer-term release of the provision. The compounding expense attributable to other provisions is recognized in net interest income. Provisions for impending losses are measured as the lower of the amount of the expected costs for fulfilling the agreement and the expected costs for terminating the agreement.

Critical estimations and assessments

The process of determining all types of provisions is associated with estimates regarding the extent and/or timing of obligations.

The provisions for environmental protection relate primarily to the commitment of DB AG to remedy the ecological burdens which arose before January 1, 1994, on the land of the former Deutsche Bundesbahn and the former Deutsche Reichsbahn. Ecological burdens are defined as contamination of soil and groundwater that requires rehabilitation and that pose risks, considerable disadvantages or considerable problems for private individuals or society at large. The legal basis for deriving remediation obligations is summarized in the soil and water laws of the Federal Government and the Federal states. The process of dealing with ecological burdens also comprises necessary rehabilitation measures for existing sewers, in order to avoid soil and groundwater contamination caused by leaks from the sewer system, as well as measures for shutting down old landfill sites.

The provision has been calculated on the basis of a discounting method using the present value, where remediation measures are probable, the remediation costs can be reliably estimated and no future benefit is expected to be derived from these measures.

The estimation of future remediation costs is subject to various factors:

SEWER MANAGEMENT:

- ***Sewer meters:*** *The need for renovation and decommissioning at the site only becomes concrete as part of the renovation planning and can then be precisely determined after completion of the renovation work (and thus the sewer meters).*
- ***Sewer aging:*** *As the sewer ages, an increasing degree of damage can be assumed.*
- ***Regulations/legal requirements:*** *Work in the track area in particular means additional work due to loading, securing, night work and line closures.*
- ***Capacities/market conditions:*** *Depending on the market situation, executing companies are available and thus capacities (personnel); however, the market situation and the restructuring procedures to be defined as part of the measures also determine their price.*

SOIL/GROUNDWATER REMEDIATION:

- ***Environmental laws/regulatory orders:*** *Changes in environmental legislation and official orders can lead to unplanned additional costs.*
- ***Remediation risks:*** *In the course of remediation measures, additional quantities for soil excavation or longer running times for groundwater extraction and purification arise, as remediation target values have not yet been reached. This leads to additional costs.*
- ***Increase in damage:*** *There is a risk that new soil/groundwater contamination that meets the criteria for the utilization of provisions may be discovered, e.g. in the course of infrastructure construction activities.*

For the valuation of provisions as of the balance sheet date, the investigation and rehabilitation obligations which are currently known have been used as the basis for estimating the expected costs in relation to the current price level. The provision is discounted on the basis of expected cash outflows using a risk-adjusted interest rate of 0.23 % (as of December 31, 2023: 0.18 %).

Provisions for impending losses from pending transactions are created if a loss is probable and can be reliably estimated. In view of the uncertainty associated with this assessment, the actual losses may differ from the original estimates and may thus also differ from the amount of the provision. In DB Group, such uncertainty results particularly from the estimation of future income from transport contracts, the associated material- and personnel-related expenses as well as any penalty payments. Changes in the estimations of these impending losses from pending transactions may have a considerable impact on the future results of operations.

The provisions for decommissioning are measured mainly on the basis of estimations that, for decommissioning and disposal costs, are derived mainly from sector-specific appraisals. The provisions are shown with their discounted settlement amount at the point at which they originate.

For the measurement of provisions for decommissioning, opportunities and risks arise from deviations from the underlying measurement assumptions, project plans and changes in (regulatory) framework conditions.

Valuation risks arise in particular in connection with:

- *interest rate and price assumptions against the backdrop of the very long-term project period*
- *technical, organizational or capacity-related delays or optimization compared to the assumed project plan for the decommissioning of the power plant*
- *higher/lower pollutant/radioactive loads from excavated materials and residual materials*
- *delayed or early receipt of permits*

Movements in other provisions are shown in the following:

€ million	Personnel-related provisions 2024	Personnel-related provisions 2023	Revenue reductions 2024	Revenue reductions 2023	Provisions for impending losses 2024	Provisions for impending losses 2023	Decommissioning obligations 2024	Decommissioning obligations 2023	Environmental protection 2024	Environmental protection 2023	Other provisions 2024	Other provisions 2023	Total 2024	Total 2023
As of Jan 1	898	828	3,654	2,604	517	545	431	465	1,353	1,383	1,480	1,745	**8,333**	**7,570**
Currency translation effects	0	- 2	1	0	2	1	–	–	0	0	4	- 5	**7**	**- 6**
Changes in the scope of consolidation	0	0	–	–	- 1	0	–	–	0	–	- 1	0	**- 2**	**0**
thereof additions to scope of consolidation	–	–	–	–	–	–	–	–	–	–	–	–	**–**	**–**
thereof disposals from scope of consolidation	0	0	–	–	- 1	0	–	–	0	–	- 1	0	**- 2**	**0**
Amounts used	- 303	- 265	- 726	- 502	- 151	- 151	- 54	- 49	- 51	- 46	- 334	- 355	**- 1,619**	**- 1,368**
Reversals	- 42	- 52	- 326	- 286	- 75	- 38	- 17	- 10	- 5	0	- 125	- 217	**- 590**	**- 603**
Reclassifications	- 154	- 14	- 3	142	- 6	- 70	–	–	0	- 2	- 263	- 136	**- 426**	**- 80**
Additions	433	390	1,921	1,696	90	223	31	29	79	30	681	444	**3,235**	**2,812**
Compounding and discounting	25	13	–	–	18	7	23	- 4	- 4	- 12	19	4	**81**	**8**
As of Dec 31	**857**	**898**	**4,521**	**3,654**	**394**	**517**	**414**	**431**	**1,372**	**1,353**	**1,461**	**1,480**	**9,019**	**8,333**

The following table breaks down the other provisions into current and non-current amounts, and also details their estimated residual maturity:

	Residual maturity							
€ million	Up to 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	More than 5 years	Total more than 1 year	Total
AS OF DEC 31, 2024								
Personnel-related provisions	396	141	103	57	39	121	**461**	**857**
Revenue reductions	4,521	–	–	–	–	–	**–**	**4,521**
Provisions for impending losses	191	70	54	25	19	35	**203**	**394**
Decommissioning obligations	44	45	43	43	43	196	**370**	**414**
Environmental protection	57	65	68	65	71	1,046	**1,315**	**1,372**
Other provisions	1,105	98	105	61	38	54	**356**	**1,461**
Total	**6,314**	**419**	**373**	**251**	**210**	**1,452**	**2,705**	**9,019**
AS OF DEC 31, 2023								
Personnel-related provisions	413	137	103	62	45	138	**485**	**898**
Revenue reductions	3,654	–	–	–	–	–	**–**	**3,654**
Provisions for impending losses	220	126	60	44	25	42	**297**	**517**
Decommissioning obligations	53	49	44	45	45	195	**378**	**431**
Environmental protection	63	61	67	54	62	1,046	**1,290**	**1,353**
Other provisions	1,053	85	122	70	59	91	**427**	**1,480**
Total	**5,456**	**458**	**396**	**275**	**236**	**1,512**	**2,877**	**8,333**

Personnel-related provisions

Benefits arising on the occasion of the termination of employment agreements (severance packages) become payable if employees are released from their duties under the terms of early retirement or part-time working in the lead-up to retirement scheme before the regular retirement age (which would not involve any reduction of retirement benefits) or if employees voluntarily terminate their employment contract in return for a severance package. Severance payments are recognized if there is a demonstrable commitment either to terminate the employment agreements of current employees in accordance with a detailed formal plan that cannot be reversed or to make severance payments if the employment contract is voluntarily terminated by employees within the framework of employment contract termination agreements.

Severance package commitments for agreements made as of the balance sheet date are recognized as other liabilities and – if they are not yet included in individual agreements and if they are part of a restructuring commitment in accordance with IAS 37 – are stated as other provisions.

Individual contractual agreements on part-time working in the lead-up to retirement are usually based on the block model. The top-up amounts paid by DB Group during the period of partial retirement in addition to the salary as well as additional contributions to the statutory pension insurance are accrued pro rata until the end of the active phase of partial retirement and deferred in accordance with IAS 19. The compensation backlog (plus the employer's contributions to social security insurance) for the additional work performed during the employment phase is also shown with the present pro rata present value as another non-current employee benefit.

Under certain conditions, DB Group offers employees the opportunity under collective agreements to reduce their working hours below their regular working hours (special part-time working for older employees). In these cases, the number of working hours is reduced to 81% of the reference or regular working hours, while the employees' remuneration is topped up to 90%. Payments into the company pension plan are granted on the basis of 100% of the reference or regular working hours.

The personnel-related provisions were structured as follows:

AS OF DEC 31 / € million	2024	2023
Personnel contractual commitments	519	454
Early retirement and part-time working in the lead-up to retirement obligations	174	188
Service anniversary provisions	62	89
Other	102	167
Total	**857**	**898**

The personnel-related provisions included commitments arising from employment agreements that result from the entitlement of many employees under labor law and the willingness of DB AG not to terminate employment contracts for operational reasons. In such cases, DB Group will incur losses in the form of personnel expenses which will have to be borne until the employment contract is terminated or the employee is placed with another company; no reciprocal benefit will be provided in return for these expenses (commitment surpluses relating to employment agreements). In addition, the contractual personnel obligations as of December 31, 2024, included unchanged provisions for restructuring measures.

With an allocation of € 502 million as of December 31, 2024 (as of December 31, 2023: € 330 million), the provision for surplus obligations from employment relationships accounted for a large proportion of DB Group's personnel-related provisions. It is the result of DB AG's contractual obligations to safeguard jobs as set out in the Demography Collective Agreement (Demografietarifvertrag; DemografieTV). The main reasons for the higher allocation compared to the end of the previous year were the updated pension obligations for the transformation of DB Cargo and for the Together Strong project as part of DB Group's S3 restructuring program.

The provisions for part-time working in the lead-up to retirement and early retirement commitments take into account the commitments arising from collective bargaining agreements, and have been calculated on the basis of actuarial reports. The provisions of the DemografieTV for special part-time work in old age included an amount of € 75 million as of December 31, 2024 (as of December 31, 2023: € 90 million) for the collectively agreed entitlement of employees with many years of service and many years of shift work.

Revenue reductions

The increase in revenue reductions as of December 31, 2024, was mainly the result of penalty obligations due to train cancellations, delays and quality deficiencies, in particular as a result of extensive infrastructure construction work, increased sickness rates and strikes, as well as the settlement procedure to compensate for revenue shortfalls in connection with the Germany-Ticket by the Federal Government and the Federal states.

Provisions for impending losses

The provisions for impending losses mainly relate to transport contracts in which commitment surpluses build up over the duration of the contracts. The additions related mainly to DB Regional.

As of December 31, 2024, an amount of € 48 million (as of December 31, 2023: € 91 million) was allocated to DB Regional and an amount of € 33 million (as of December 31, 2023: € 28 million) was reversed.

Decommissioning provisions

The provisions for decommissioning obligations resulted from the pro rata decommissioning obligation for a joint venture power plant. When measuring the provision, a customary cost increase rate of 2.51 % (as of December 31, 2023: 2.96 %) and a nominal interest of 3.26 % (as of December 31, 2023: 3.54 %) were taken into account.

Provisions for environmental protection

Of the environmental protection provisions, € 1,363 million was attributable to DB AG as of December 31, 2024 (as of December 31, 2023: € 1,339 million). The increase of € 25 million was largely driven by additions to restructuring obligations (€ +79 million). The utilization (€ –50 million) and interest rate development (€ –4 million) had a dampening effect. In order to take account of the remedial action obligations recognized in the provisions for environmental protection, DB AG has set up various programs, including the following:

- the 4-stage program for soil remediation
- the 3-stage sewerage network program
- the 2-stage landfill shut-down program

Structured processing ensures a legally compliant and cost- and effort-optimized procedure for the recording, risk assessment and remediation of identified hazards to protected assets.

In the 4-stage soil decontamination program, existing soil and/or groundwater contamination is localized via the stages "historic exploration," "orienting investigation" and "detail investigation," and is assessed on the basis of the relevant statutory testing criteria. If any negative change in soil conditions or ecological burdens is identified, implementation of the necessary remedial action is planned by the steps feasibility study, model planning and approval planning. The process of carrying out the remedial action is supported by a binding remedial action plan or a public-sector agreement with defined remedial action objectives.

The 3-stage sewerage network program aims to remedy any contamination of soil and/or groundwater resulting from leaks. This is accompanied by an optimization of the existing sewer network for future use, so that hazard prevention can be limited to this future network. Any network that is not necessary for operation will be decommissioned. The sewerage program will be carried out via stage 1 "recording," stage 2 "inspection" and stage 3 "remedial action/decommissioning." Legal requirements are set out in the Water Resources Accounting Act (Wasserhaushaltsgesetz; WHG), the Water Acts of the Federal states and the own control regulations.

The 2-stage program "shut-down of landfill sites" systematically records all legacy landfill sites operated by DB Group (stage 1). The requirements resulting from the Recycling Accounting Act (Kreislaufwirtschaftsgesetz; KrWG) and the Landfill Site Regulation (Deponieverordnung; DepV) are used as the basis for planning and implementing the processes of decommissioning and recultivating the areas (stage 2a) and the subsequent maintenance (stage 2b).

A reassessment of the need for provisions was carried out in 2024. As a result, previous assumptions regarding the financing of own work through income, the development of construction costs, capacity requirements and in-house production depth had to be adjusted. This resulted in an additional provision requirement of € 79 million. The addition to provisions was recognized as a liability as of December 31, 2024.

Other provisions

The other provisions comprised provisions for litigation risks, compensation for damages, real estate risks, decommissioning and demolition obligations, guarantee and warranty obligations, insurance, liabilities, project risks, third-party obligations for maintenance and other tax risks as well as numerous other issues which individually are of minor significance.

(33) DEFERRED ITEMS

DB Group receives various public grants, which are generally granted on the basis of assets or performance. The grants are recognized in the balance sheet as soon as it is certain that they will be provided and as soon as the conditions necessary for receiving the grants have been satisfied. The grants related to assets, and in particular investment grants, are deducted directly from the assets for which the grants have been received. The interest benefits (difference between nominal value and present value) from interest-free loans granted (full repayment as of December 31, 2024) are recognized as deferred income on the basis of the contractual grant conditions. Income from the pro rata temporis reversal of these deferred income items is recognized as other operating income.

The deferred items contained the following:

AS OF DEC 31 / € million	**2024**	2023
Deferred public-sector grants	127	111
Deferred income	1,229	862
Other	383	390
Total	**1,739**	**1,363**
Non-current share	908	598
Current share	831	765

Notes to the statement of cash flows

The statement of cash flows shows the changes in cash and cash equivalents in the year under review, and was prepared in accordance with IAS 7 (Statement of Cash Flows). The cash flow from operating activities is presented using the indirect method.

The following explanations relate to the continuing operations.

Interest income and interest payments, dividend income and tax payments are stated under operating activities.

Cash and cash equivalents include the cash and cash equivalents stated in the balance sheet with a residual maturity of up to three months (cash in hand, cash at banks as well as security investments). As of December 31, 2024, € 6 million of the cash and cash equivalents were still restricted.

Current receivables due from banks (as of December 31, 2024: € 185 million; as of December 31, 2023: € 228 million), resulting from collateral agreements in connection with financial futures, are shown under current other receivables and assets. Because it is becoming increasingly difficult to predict the performance of financial futures, it can only be assumed to a limited extent that such hedges represent current liquidity.

The cash flow from discontinued operations relates to the former DB Schenker and DB Arriva segments.

CASH FLOW FROM OPERATING ACTIVITIES

The cash flow from operating activities is calculated by adjusting the net profit/loss for the period before taxes by non-cash amounts (in particular additions to and reversals of other provisions) and by adding other changes in current assets, in liabilities (excluding financial debt) and provisions. The cash inflow from operating activities is then established after due consideration is given to interest and tax payments.

In accordance with IFRS 16, outflows related to leases are recognized in cash flow from financing activities if they are redemption payments, and are recognized in cash flow from operating activities if they are payments of interest.

The cash inflow from operating activities increased significantly in 2024. The main reason for this was a strong improvement in the net loss, adjusted for slightly higher depreciation of property, plant and equipment and intangible assets, increased inventories, trade receivables and other assets, higher other liabilities and deferred income, lower trade payables and pension provisions as well as a further significant increase in non-cash expenses.

In 2024, non-cash expenses and income increased in particular as a result of a net increase of € 437 million in expenses from the addition to and reversal of other provisions.

CASH FLOW FROM INVESTING ACTIVITIES

The cash flow from investing activities is calculated as the cash inflow provided by the disposal of property, plant and equipment and intangible assets as well as by investment grants, and the cash outflow for capital expenditures on property, plant and equipment and intangible assets, as well as cash flow from the addition and disposal of non-current financial assets.

Payments received from investment grants are shown under investing activities due to the close connection between investment grants received and the payments made for capital expenditures in property, plant and equipment.

When changes take place in the scope of consolidation as a result of the acquisition or sale of companies, the acquisition price paid (excluding any liabilities that are transferred) less the acquired or sold financial resources are stated as cash flow from investing activities.

The increased cash outflow from investing activities in 2024 resulted in particular from significantly higher payments for capital expenditures in property, plant and equipment and intangible assets (€ +2,131 million; +13.5%) with an almost unchanged net cash inflow from investment grants and repayments (€ –11 million; –0.1%). Payments for investments in financial assets developed in the opposite direction (€ –295 million). Cash inflows and outflows for investments in financial assets included net cash inflows of € 73 million (previous year: outflows of € 243 million) for investments from the acquisition of transport concessions (IFRIC 12). Proceeds from the sale of shares in consolidated companies include € 1.2 billion from the sale of DB Arriva. The deconsolidation of DB Arriva led to a cash outflow (as assets held for sale) of € 488 million.

CASH FLOW FROM FINANCING ACTIVITIES

The cash flow from financing activities is due to additions to capital, the net inflows and outflows attributable to senior bonds issued, changes in bank borrowings and loans as well as outflows for the redemption of finance leasing liabilities and interest-free loans.

The cash inflow from financing activities increased by about € 3.4 billion. This was driven in particular by increased cash inflows from equity contributions by the Federal Government (€ +4.4 billion), an increase in net cash inflows from the taking out and redemption of bank borrowings and commercial paper as well as the discontinuation of the profit distribution to the Federal Government (previous year: € 650 million). In contrast, the net cash inflow from the issue and redemption of senior bonds declined.