

Deutsche Telekom

INTERIM GROUP REPORT

H1 2023

JANUARY 1 TO JUNE 30



Contents

Deutsche Telekom at a glance

To our shareholders

- 5 Development of selected financial data
- 7 Highlights in the second quarter of 2023

Interim Group management report

- 9 Group organization, strategy, and management
- 10 The economic environment
- 12 Development of business in the Group
- 23 Development of business in the operating segments
- 36 Events after the reporting period
- 36 Forecast
- 36 Risks and opportunities

Interim consolidated financial statements

- 38 Consolidated statement of financial position
- 39 Consolidated income statement
- 40 Consolidated statement of comprehensive income
- 41 Consolidated statement of changes in equity
- 43 Consolidated statement of cash flows
- 44 Significant events and transactions
- 55 Other disclosures
- 69 Events after the reporting period

Responsibility statement

Review report

Additional information

- 72 Reconciliation for the change in disclosure of key figures for the prior-year period
- 73 Reconciliation for the organic development of key figures for the prior-year period
- 74 Glossary
- 74 Disclaimer
- 75 Financial calendar

Deutsche Telekom at a glance

millions of €

	H1 2023	H1 2022	Change %	Q2 2023	Q2 2022	Change %	FY 2022
Revenue and earnings (according to the management approach)^a							
Net revenue ^b	55,060	55,634	(1.0)	27,221	27,888	(2.4)	114,413
Of which: domestic %	22.8	22.3		23.0	21.4		22.1
Of which: international %	77.2	77.7		77.0	78.6		77.9
Service revenue ^{b, c}	45,767	44,666	2.5	22,952	22,633	1.4	91,988
EBITDA	35,122	23,019	52.6	11,077	9,927	11.6	43,986
EBITDA (adjusted for special factors)	23,138	22,912	1.0	11,622	11,476	1.3	46,410
EBITDA AL	31,780	18,539	71.4	9,416	7,453	26.3	35,989
EBITDA AL (adjusted for special factors)	20,002	19,763	1.2	10,038	9,891	1.5	40,208
EBITDA AL margin (adjusted for special factors) %	36.3	35.5		36.9	35.5		35.1
Profit (loss) from operations (EBIT)	23,222	8,684	n.a.	5,207	2,356	n.a.	16,159
Revenue and earnings from continuing operations (according to financial statements)^a							
Net revenue ^b	55,045	55,528	(0.9)	27,221	27,835	(2.2)	114,197
EBITDA	22,121	22,559	(1.9)	11,077	9,695	14.3	43,049
Profit (loss) from operations (EBIT)	10,221	8,415	21.5	5,207	2,221	n.a.	15,414
Net profit (loss)	16,899	5,409	n.a.	1,539	1,460	5.4	8,001
Net profit (loss) (adjusted for special factors)	3,846	4,683	(17.9)	1,887	2,445	(22.8)	9,081
Earnings per share (basic and diluted) €	3.40	1.09	n.a.	0.31	0.29	6.9	1.61
Adjusted earnings per share (basic and diluted) €	0.77	0.94	(18.1)	0.38	0.49	(22.4)	1.83
Statement of financial position							
Total assets	299,701	301,686	(0.7)				298,590
Shareholders' equity	94,399	88,492	6.7				87,320
Equity ratio %	31.5	29.3					29.2
Net debt ^d	136,893	146,104	(6.3)				142,425
Cash flows							
Net cash from operating activities	18,864	17,979	4.9	9,306	8,621	7.9	35,819
Cash capex	(9,436)	(12,259)	23.0	(4,611)	(5,086)	9.3	(24,114)
Cash capex (before spectrum investment)	(9,181)	(9,642)	4.8	(4,422)	(4,984)	11.3	(21,019)
Free cash flow (before dividend payments and spectrum investment)	9,740	8,421	15.7	4,918	3,671	34.0	15,239
Free cash flow AL (before dividend payments and spectrum investment)	7,101	6,540	8.6	3,522	2,759	27.7	11,470
Net cash (used in) from investing activities	(2,274)	(10,148)	77.6	(4,278)	(5,636)	24.1	(22,306)
Net cash (used in) from financing activities	(13,570)	(10,491)	(29.3)	(7,230)	(7,838)	7.8	(15,438)

^a The GD Towers business entity, which operated the cell tower business in Germany and Austria and was assigned to the Group Development operating segment, was recognized as a discontinued operation in the interim consolidated financial statements from the third quarter of 2022 until its sale on February 1, 2023. Prior-year comparatives were adjusted retrospectively. In the interim Group management report, we include the contributions by GD Towers in the results of operations according to the management approach for the period mentioned. Prior-year comparatives were not adjusted retrospectively. For information on the sale of GD Towers, please refer to the section "Group organization, strategy, and management" in the interim Group management report and the section "Changes in the composition of the Group and other transactions" in the interim consolidated financial statements.

^b As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

^c As of January 1, 2023, the definition of service revenue was extended. Prior-year comparatives were adjusted retrospectively.

^d Including net debt reported under liabilities directly associated with non-current assets and disposal groups held for sale.

millions	June 30, 2023	Mar. 31, 2023	Change June 30, 2023/ Mar. 31, 2023 %	Dec. 31, 2022	Change June 30, 2023/ Dec. 31, 2022 %	June 30, 2022	Change June 30, 2023/ June 30, 2022 %
Fixed-network and mobile customers							
Mobile customers ^a	245.9	248.1	(0.9)	245.4	0.2	241.1	2.0
Fixed-network lines ^b	25.3	25.3	0.1	25.3	0.1	25.3	0.1
Broadband customers ^c	21.7	21.6	0.6	21.4	1.4	21.1	2.8

^a Including T-Mobile US wholesale customers (June 30, 2023: 24.0 million; Mar. 31, 2023: 29.7 million; Dec. 31, 2022: 30.2 million; June 30, 2022: 30.0 million). In the second quarter of 2023, the number of wholesale customers at T-Mobile US decreased by 5.7 million, primarily due to a base adjustment.

^b In the second quarter of 2023, fixed-network lines in Greece were adjusted retrospectively for the first quarter of 2023 due to changes in definitions.

^c Excluding wholesale.

The figures shown in this report were rounded in accordance with standard business rounding principles. As a result, the total indicated may not be equal to the precise sum of the individual figures. Changes were calculated on the basis of millions for greater precision.

For information on the development of business in the operating segments, please refer to the section "[Development of business in the operating segments](#)" in the interim Group management report and in the IR back-up on our [Investor Relations website](#).

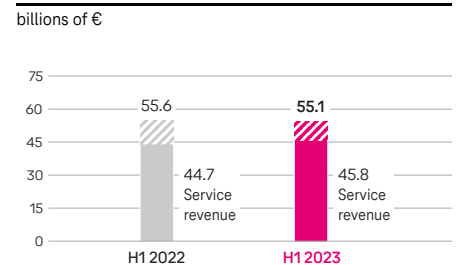
For information on our performance indicators and alternative performance measures, please refer to the section "Management of the Group" in the 2022 combined management report ([2022 Annual Report](#)) and our [Investor Relations website](#).

To our shareholders

Development of selected financial data

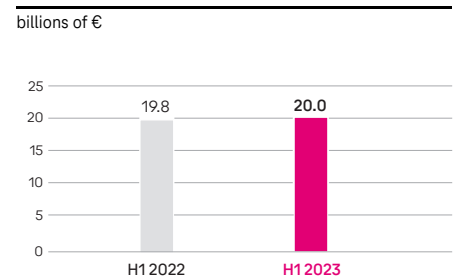
Net revenue, service revenue^{a, b}

- Net revenue decreased by 1.0 % to EUR 55.1 billion; in organic terms, it decreased only slightly by 0.4 %. High-value service revenue increased by 2.5 % to EUR 45.8 billion; in organic terms, the increase was 2.9 %.
- Our Germany segment increased revenue by 2.4 % year-on-year, on the back of strong development of service revenues.
- In the United States segment, revenue declined by 1.4 %; on an organic basis, revenue was down 2.2 % against the prior year.
- Revenue in our Europe segment grew by 5.0 % on account of higher mobile service revenues.
- Revenue in Systems Solutions was up 1.9 % year-on-year on the back of growth in the Digital, Road Charging, and Advisory portfolio areas.
- In Group Development, revenue declined significantly due to the sale of T-Mobile Netherlands and GD Towers, but was up 3.1 % against the prior year on an organic basis.



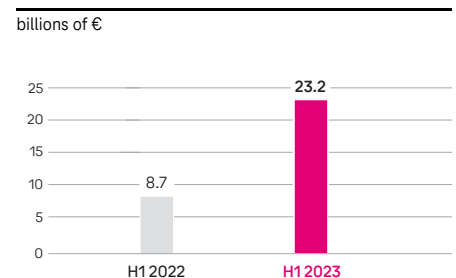
EBITDA AL (adjusted for special factors)^a

- Adjusted EBITDA AL grew by 1.2 % to EUR 20.0 billion. In organic terms, it increased by 2.4 %.
- In our Germany segment, adjusted EBITDA AL was up 4.0 %, driven by high-value revenue growth and enhanced cost efficiency.
- In the United States, adjusted EBITDA AL increased by 4.6 %, partly due to exchange rate effects. In organic terms, it increased by 3.1 %. Adjusted core EBITDA AL grew by 10.1 % to EUR 12.9 billion.
- Adjusted EBITDA AL in the Europe segment increased by 2.3 %.
- In Systems Solutions, adjusted EBITDA AL grew by 8.2 % due to efficiency effects and increased revenue in our Digital and Road Charging portfolio areas.
- In Group Development, adjusted EBITDA AL declined significantly due to the sale of T-Mobile Netherlands and GD Towers. In organic terms, it increased by 47.1 %.
- At 36.3 %, the Group's adjusted EBITDA AL margin held steady at a high level. The adjusted EBITDA AL margin was 40.8 % in the Germany segment, 36.5 % in the United States segment, and 35.3 % in the Europe segment.



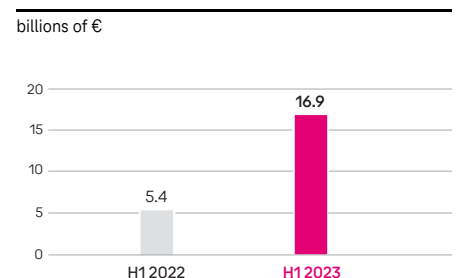
Profit/loss from operations (EBIT)^a

- EBIT increased substantially to EUR 23.2 billion, mainly as a result of the gain on deconsolidation from the sale of GD Towers.
- Special factors had a positive effect of EUR 11.8 billion on EBITDA AL. Deconsolidations, disposals, and acquisitions generated proceeds of EUR 12.4 billion, most of which was attributable to the sale of GD Towers. In the prior-year period, the special factors affecting EBITDA AL totaled EUR 1.2 billion.
- EBITDA AL thus increased by EUR 13.2 billion to EUR 31.8 billion.
- At EUR 11.9 billion, depreciation, amortization and impairment losses were lower than in the prior-year period, with the decrease being almost exclusively attributable to the United States and Group Development operating segments.



Net profit

- Our net profit increased significantly to EUR 16.9 billion due to the sale of GD Towers.
- Loss from financial activities increased by EUR 1.4 billion to EUR 3.0 billion, with other financial income/expense decreasing in particular in connection with the measurement of provisions and liabilities. Finance costs increased from EUR 2.5 billion to EUR 2.9 billion.
- The tax expense decreased by EUR 0.2 billion to EUR 1.2 billion.
- Profit attributable to non-controlling interests increased by EUR 1.8 billion to EUR 2.1 billion, a trend mainly attributable to the United States segment.
- Adjusted earnings per share decreased from EUR 0.94 to EUR 0.77.



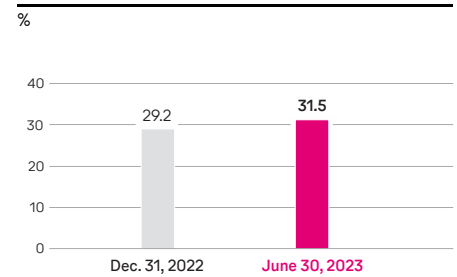
For a reconciliation for the organic development of key figures for the prior-year comparative period, please refer to the section "Additional information."

^a The GD Towers business entity, which operated the cell tower business in Germany and Austria and was assigned to the Group Development operating segment, was recognized as a discontinued operation in the interim consolidated financial statements from the third quarter of 2022 until its sale on February 1, 2023. In the interim Group management report, we include the contributions by GD Towers in the results of operations according to the management approach for the period mentioned. For information on the sale of GD Towers, please refer to the section "Group organization, strategy, and management" in the interim Group management report and the section "Changes in the composition of the Group and other transactions" in the interim consolidated financial statements.

^b As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

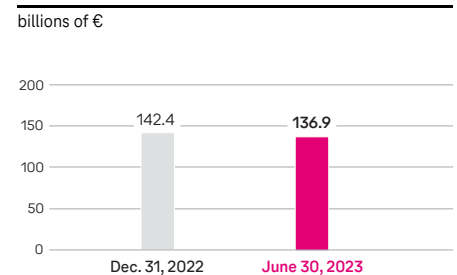
Equity ratio

- The equity ratio increased by 2.3 percentage points against December 31, 2022 to 31.5 %.
- The increase in shareholders' equity from EUR 87.3 billion to EUR 94.4 billion is primarily attributable to profit of EUR 19.0 billion.
- Shareholders' equity was reduced in particular by transactions with owners (EUR 7.9 billion), mainly in connection with the share buy-back program at T-Mobile US. Dividend payments to our shareholders (EUR 3.5 billion) and to other shareholders of subsidiaries (EUR 0.2 billion) also reduced shareholders' equity. Other comprehensive income also decreased the carrying amount (EUR 0.6 billion).



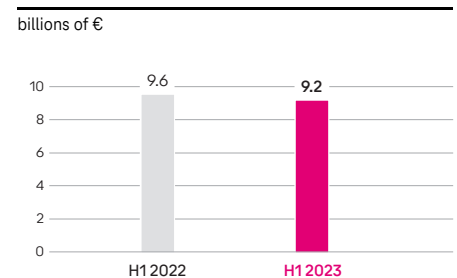
Net debt^c

- Net debt decreased by EUR 5.5 billion compared with the end of 2022 to EUR 136.9 billion.
- The main factors reducing net debt were the cash inflow of EUR 10.7 billion from the sale of GD Towers, and free cash flow (before dividend payments and spectrum investment) of EUR 9.7 billion. Exchange rate effects totaling EUR 1.7 billion also reduced net debt.
- Net debt was increased in particular by the share buy-back program at T-Mobile US (EUR 7.6 billion), the dividend payment – including to non-controlling interests – (EUR 3.6 billion), the sale-and-leaseback transaction entered into in connection with the sale of GD Towers (EUR 3.0 billion), and additions of lease liabilities and right-of-use assets (EUR 2.0 billion). Other effects of EUR 0.4 billion also had an increasing effect.



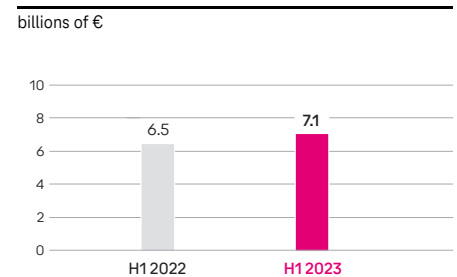
Cash capex (before spectrum investment)

- Cash capex (before spectrum investment) decreased from EUR 9.6 billion to EUR 9.2 billion.
- In the United States segment, cash capex decreased by EUR 1.0 billion as a result of higher cash outflows in the prior year for the accelerated build-out of the 5G network and the integration of Sprint. By contrast, cash capex in the Germany segment increased by EUR 0.5 billion.
- Cash capex (including spectrum investment) decreased by EUR 2.8 billion to EUR 9.4 billion. Spectrum licenses were acquired in the Europe operating segment for a total of EUR 0.2 billion and in the United States segment for a total of EUR 0.1 billion in the reporting period. In the prior-year period, the United States segment had acquired spectrum licenses for a total amount of EUR 2.6 billion.



Free cash flow AL (before dividend payments and spectrum investment)

- Free cash flow AL was up by EUR 0.6 billion to EUR 7.1 billion.
- The sound business performance in the operating segments had an increasing effect on net cash from operating activities. Lower cash outflows in connection with the integration of Sprint in the United States and lower cash capex (before spectrum investment) also had a positive impact.
- Free cash flow AL was reduced by an increase of EUR 0.8 billion in cash outflows for the repayment of lease liabilities, mainly in the United States and Germany segments, an increase of EUR 0.2 billion in interest payments (net), and an increase of EUR 0.2 billion in tax payments.



For further information, please refer to the section “[Development of business in the Group](#)” in the interim Group management report.

For further information on the development of business in the operating segments, please refer to the section “[Development of business in the operating segments](#)” in the interim Group management report and to the IR back-up on our [Investor Relations website](#).

For further information on our performance indicators and alternative performance measures, please refer to the section “[Management of the Group](#)” in the 2022 combined management report ([2022 Annual Report](#)) and our [Investor Relations website](#).

^c Including net debt reported under liabilities directly associated with non-current assets and disposal groups held for sale.

Highlights in the second quarter of 2023

For further information on these and other events, please refer to our [media information](#).

For comprehensive information on the T-Share, please visit our [Investor Relations website](#).

Guidance raised again for the 2023 financial year

In view of the overall sound business performance, we are raising our guidance for adjusted EBITDA AL of the Group for the 2023 financial year. Instead of around EUR 40.9 billion, we now expect to post adjusted EBITDA AL of around EUR 41.0 billion.

Transactions

Sale of the U.S. wireline business. On September 6, 2022, T-Mobile US reached an agreement with Cogent on the sale of T-Mobile US' fiber-optic-based wireline business, under which Cogent will take over all shares in the entity. The transaction was closed on May 1, 2023.

Share buy-back program continued and majority stake in T-Mobile US secured. In the first half of 2023, T-Mobile US bought back around 58 million additional shares with a total volume of USD 8.3 billion (EUR 7.7 billion) under its share buy-back program. Taking the treasury shares held by T-Mobile US into account, Deutsche Telekom's stake in T-Mobile US stood at 51.3 % as of June 30, 2023.

For further information on these corporate transactions, please refer to the section "Group organization, strategy, and management" in the interim Group management report and the section "Changes in the composition of the Group and other transactions" in the interim consolidated financial statements.

Rating

On May 19, 2023, the rating agency Standard & Poor's (S&P) upgraded the long-term rating for **Deutsche Telekom AG** from BBB to BBB+ with a stable outlook. S&P also raised the rating for our subsidiary **T-Mobile US** from its previous level of BBB- to BBB with a stable outlook. Both Moody's and Fitch had already upgraded their ratings for T-Mobile US in April 2023, the former from Baa3 to Baa2 with a stable outlook, and the latter from BBB- to BBB+ with a stable outlook.

Network build-out

Germany. As of the end of the first half of 2023, our 5G network was available to 95.3 % of the German population, and a total of around 6.2 million households have the option of a direct connection to our fiber-optic network.

United States. As of the end of the first half of 2023, T-Mobile US' 5G network covered around 98 % of the U.S. population, with 285 million people already benefiting from Ultra Capacity 5G.

Europe. As of the end of the first half of 2023, our national companies covered on average 58.7 % of the population in our European footprint with 5G, and a total of around 8.5 million households can access our high-performance fiber-optic network offering gigabit speeds.

Cooperations, partnerships, and major deals

Fiber-optic cooperations. We continue to systematically execute on our strategy regarding the shared use of networks, and to this end, we agreed and finalized further cooperations on the fiber-optic build-out in the second quarter of 2023. In addition to our regional partnerships with the provider Städtische Werke Netz + Service for Kassel in North Hesse and with housing association Marzahner Tor in Berlin, we have also agreed framework conditions with the central association of the German housing industry for our fiber-optic build-out to properties managed by this sector. Furthermore, June 2023 marked the start of the implementation phase of the Saxon State Ministry of Education and Cultural Affairs' broadband access initiative to connect schools across Saxony to our fiber-optic network.

Cooperation with Energy Web. Deutsche Telekom MMS has joined the Energy Web Foundation ecosystem and supports it with secure Web3 infrastructure. Energy Web's members comprise energy groups and IT service providers who utilize blockchain technology to accelerate the transition to renewable energy. Solutions available on the platform are designed to unlock a more decentralized, digitalized, and decarbonized energy system.

For further information, please refer to our [media report](#).

Business automation based on European standards. T-Systems and UiPath have entered into a partnership to deliver hyperautomation in the Open Telekom Cloud with an initial focus on the public, healthcare, and public transport sectors in the DACH region. UiPath's AI-powered platform portfolio with applications such as Machine Learning, Process Mining, and Communication Mining empowers businesses to automate and digitalize entire processes from end to end. Data will be hosted in European data centers and accessed exclusively from Europe for maintenance and analytics.

For further information, please refer to our [media report](#).

Network build-out along rail routes and freeways. In the two years since the start of the mobile network build-out cooperation with **Deutsche Bahn**, LTE coverage with speeds of 200 Mbit/s along Deutsche Bahn's major routes has risen to 97 %. Germany's freeways, too, are benefiting from nationwide simpler and faster mobile communications network build-out following an agreement reached with **Autobahn GmbH** in May 2023. Plans include the construction of around 400 new cell sites to increase network densification in the coming years.

Products, rate plans, and services

New B2B campus network solution. Our "Campus Network M with Industrial Frequencies" is a dual-slice campus network offering created specifically for the manufacturing industries. Based on the public 3.6 GHz frequency range in our 5G network, companies are able to additionally operate the solution as a virtual private network and benefit from the exclusivity of the local 5G spectrum in the 3.7 to 3.8 GHz range made available by the Bundesnetzagentur without the need to install their own 5G core network infrastructure. Critical applications thus run separately from the public 5G network – at high bandwidths and without being influenced by public data traffic.

For further information, please refer to our [media report](#).

T-Mobile US launches Phone Freedom. T-Mobile US is making another Un-carrier move with Phone Freedom, including the Go5G Plus rate plan which guarantees that both new and existing customers always get the same device deals and are upgrade-ready every two years. Customers can also exchange their devices still locked into device contracts for a new one with The Easy Unlock option, and those who switch benefit from a Go Back Guarantee.

Awards

Networks. Deutsche Telekom is voted #1 in the [Connect readers' choice 2023](#) (German only) in the categories Mobile Network Operator, Network Operator Prepaid Cards, Fixed-Network Operator, and IPTV Services. Our secondary brand congstar wins in the category Mobile Communications Provider. The [umlaut Audit Report 2023](#) once again ranks T-Mobile US' 5G network best in class for coverage, stability, and upload and download speeds.

Investor relations. Deutsche Telekom takes the top spot in the German investor relations association DIRK and WirtschaftsWoche magazine's [Investor Relations Ranking 2023](#) (German only) in the categories Investor Relations and Best Investor Relations Manager.

For information on awards for responsible corporate governance, please refer to our [website](#).

Interim Group management report

Group organization, strategy, and management

With regard to our Group organization, strategy, and management, please refer to the explanations in the 2022 combined management report ([2022 Annual Report](#)). From the Group's point of view, the following significant events in the first half of 2023 resulted in changes and/or additions.

Group organization

Sale of GD Towers. On July 13, 2022, Deutsche Telekom agreed to sell a 51.0 % stake in the cell tower business companies in Germany and Austria (GD Towers), hitherto assigned to the Group Development operating segment, to DigitalBridge and Brookfield. After all necessary regulatory approvals had been duly granted and all other closing conditions met, the transaction was closed on February 1, 2023. The sale price is based on an enterprise value of EUR 17.5 billion. The total preliminary gain on deconsolidation resulting from the sale amounts to EUR 15.9 billion, of which EUR 12.9 billion is included in profit/loss from discontinued operation as other operating income in the consolidated income statement as of the deconsolidation date. As Deutsche Telekom has largely leased back the sold passive network infrastructure in Germany and Austria under a sale and leaseback transaction, a further EUR 3.0 billion will be recognized pro rata in subsequent periods. Overall, right-of-use assets were recognized in the amount of EUR 2.0 billion and lease liabilities in the amount of EUR 5.0 billion. The transaction resulted in preliminary cash proceeds of EUR 10.7 billion. The stake retained by Deutsche Telekom of 49.0 % has been included in the consolidated financial statements using the equity method since February 1, 2023. The carrying amount of the investment amounted to EUR 6.1 billion as of June 30, 2023.

For further information on the sale of the GD tower companies, please refer to the section ["Changes in the composition of the Group and other transactions"](#) in the interim consolidated financial statements.

Sale of the U.S. wireline business. On September 6, 2022, T-Mobile US reached an agreement with Cogent Infrastructure (Cogent) on the sale of T-Mobile US' fiber-optic-based wireline business. Under the agreement, Cogent will take over all shares in the entity that holds all of the assets and liabilities related to the former Sprint's fiber-optic-based wireline network. The transaction was closed on May 1, 2023. All necessary regulatory approvals had been duly granted and all other closing conditions met. The sale price was USD 1 and was subject to customary adjustments laid down in the purchase agreement. The cash proceeds received upon completion of the transaction amounted to USD 14 million (EUR 13 million). The loss on deconsolidation resulting from the sale amounted to EUR 4 million. In addition, upon completion of the transaction, T-Mobile US undertook to enter into a separate agreement on IP transit services, according to which T-Mobile US will pay a total of USD 0.7 billion (around EUR 0.6 billion) to Cogent in agreed installments over subsequent periods. In connection with the payment obligations entered into as part of the transaction, total liabilities of EUR 0.7 billion had already been recognized in the 2022 financial year. As a result of the concluded sales agreement, the assets and liabilities of the wireline business were reported in the consolidated statement of financial position as "held for sale" from September 30, 2022 up until their sale on May 1, 2023.

Share buy-back program continued and majority stake in T-Mobile US secured. In the first half of 2023, T-Mobile US bought back around 58 million additional shares with a total volume of USD 8.3 billion (EUR 7.7 billion) under its share buy-back program. Taking the treasury shares held by T-Mobile US into account, Deutsche Telekom's stake in T-Mobile US stood at 51.3 % as of June 30, 2023.

Furthermore, the transaction described below will affect the segment and organizational structure of Deutsche Telekom in the future:

Agreement on the acquisition of Ka'ena in the United States. On March 9, 2023, T-Mobile US entered into a Merger and Unit Purchase Agreement for the acquisition of 100 % of the outstanding equity of Ka'ena Corporation and its subsidiaries including, among others, Mint Mobile, for a maximum purchase price of USD 1.35 billion to be paid out 39 % in cash and 61 % in shares of T-Mobile US common stock. Ka'ena Corporation is currently one of the wholesale partners of T-Mobile US, offering wireless telecommunications services to customers. The purchase price is variable dependent upon specified performance indicators of Ka'ena Corporation during certain periods before and after closing and consists of an upfront payment at deal close, subject to certain agreed-upon adjustments, and a variable earnout payable 24 months after the close of the transaction. The upfront payment is expected to be approximately USD 950 million, before working capital adjustments. The acquisition is subject to certain customary closing conditions, including certain regulatory approvals, and is expected to close by the end of 2023.

Management of the Group

Presentation of GD Towers according to the management approach. The GD Towers business entity had been recognized in the interim consolidated financial statements as a discontinued operation from the third quarter of 2022 until its sale on February 1, 2023. In the interim Group management report, we include the contributions by GD Towers in the results of operations according to the management approach for the period mentioned. The following table provides a reconciliation of the amounts recognized in the consolidated income statement to the financial performance indicators relevant for the management approach:

millions of €						
	H1 2023	Of which: continuing operations	Of which: discontinued operation	H1 2022	Of which: continuing operations	Of which: discontinued operation
Net revenue^a	55,060	55,045	15	55,634	55,528	106
Service revenue^a	45,767	45,770	(4)	44,666	44,674	(8)
EBITDA	35,122	22,121	13,001	23,019	22,559	460
Depreciation of right-of-use assets	(2,453)	(2,453)	0	(3,770)	(3,668)	(101)
Interest expenses on recognized lease liabilities	(888)	(883)	(5)	(710)	(697)	(13)
EBITDA AL	31,780	18,784	12,996	18,539	18,193	346
Special factors affecting EBITDA AL	11,779	(1,145)	12,924	(1,224)	(1,223)	(1)
EBITDA AL (adjusted for special factors)	20,002	19,929	73	19,763	19,416	347
Depreciation, amortization and impairment losses	(11,900)	(11,900)	0	(14,335)	(14,144)	(192)
Profit (loss) from operations (EBIT)	23,222	10,221	13,001	8,684	8,415	269
Profit (loss) from financial activities	(2,954)	(2,938)	(16)	(1,523)	(1,539)	15
Profit (loss) before income taxes	20,269	7,283	12,986	7,160	6,876	284
Earnings per share (basic and diluted) €	3.40	0.64	2.75	1.09	1.05	0.04
Adjusted earnings per share (basic and diluted) €	0.77	0.76	0.01	0.94	0.90	0.04

^a As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

Broader definition of service revenue. Since January 1, 2023, service revenue additionally includes certain software revenues generated with ICT business in the Systems Solutions and Europe operating segments, as well as in the Group Headquarters & Group Services segment. Comparative figures have been adjusted retrospectively.

The economic environment

This section provides important additional information and explains recent changes in the economic environment compared to those described in the 2022 combined management report ([2022 Annual Report](#)), focusing on macroeconomic developments, the overall economic outlook including the currently prevailing economic risks, and the regulatory environment in the first half of 2023.

Macroeconomic development

The global economic outlook dampened in the second quarter of 2023. The inflation-induced loss of purchasing power is stifling macroeconomic demand, while higher interest rates are negatively affecting financing terms for households and businesses. The upturn in consumer prices in the United States and the eurozone has slowed, although the core inflation rate remains at a relatively high level.

In its July 2023 forecast, the International Monetary Fund (IMF) expects global economic output to grow by 3.0 % in the current year compared to growth of 3.5 % in the prior year.

For the German economy, the IMF expects economic output to decline by 0.3 %. According to the Bitkom-ifo-Digitalindex, the business climate in the digital sector deteriorated in the second quarter of 2023, but remains positive in contrast to the business climate in the economy as a whole.

The national economies in our core markets in North America and Europe are set to grow this year. According to the IMF forecast, economic output is expected to grow this year by 1.8 % in the United States and by 0.9 % in the eurozone.

Overall economic outlook

Cooling inflation and falling prices on the global energy markets could lead to moderate economic recovery in the course of the year. However, significant downside risks continue to weigh on the economic outlook. If inflation falls at a slower rate than expected, it could result in the need for a more aggressive tightening of monetary policy. This would further dampen consumer demand. Europe avoided a gas shortage in winter 2022/23, but the supply situation for winter 2023/24 is still uncertain and energy prices could rise if demand for natural gas increases in Asia. A possible escalation of the war in Ukraine could also lead to a renewed rise in energy prices. Geopolitical tensions between the United States and China present a further risk, and could put significant pressure on global trade in goods and international supply chains.

Regulation

Awarding of spectrum

At the multi-band auction in Croatia, which began with a bidding phase on January 17, 2023, Hrvatski Telekom secured an above-average package of spectrum, comprising the largest share of spectrum (2x 105 MHz), for around EUR 135 million.

The Polish regulatory authority UKE launched the award procedure for the 3,400 to 3,800 MHz band with an auction announcement on June 22, 2023. Mobile network operators had until August 8, 2023 to register their interest in participating. The bidding phase is scheduled for September/October 2023. Awards for the 700/800 MHz and 26 GHz bands could follow in the course of 2023. In the Czech Republic, the procedure to extend the 900/1,800 MHz GSM license, which expires in 2024, is expected to begin in the course of 2023. Meanwhile, the Slovak regulator announced a procedure (auction) to re-award spectrum in the 900 MHz and 2,100 MHz bands at the end of 2023. In Austria and Hungary, the millimeter wave spectrum in the 26 GHz band is also expected to be awarded in 2023. To free up this band, Hungary has already begun awarding substitute frequencies in the 32 GHz band.

The following table provides an overview of the main ongoing and planned spectrum awards and auctions as well as license extensions. It also indicates spectrum to be awarded in the near future in various countries.

Main spectrum awards

	Expected start of award procedure	Expected end of award procedure	Frequency ranges	Planned award procedures
Austria	Q3 2023	Q4 2023	26 GHz/3,400–3,800 MHz (residual spectrum)	Auction (SMRA ^a)
Poland	Started	Q4 2023	3,400–3,800 MHz	Auction (SMRA ^a), 4 blocks of 100 MHz, cap set at 100 MHz in consultation draft
Poland	Q3 2023	Q4 2023	700/800 MHz	Auction or tender procedure ^b , details and timeline tbd
Poland	Q3 2023	Q4 2023	26 GHz	Details tbd
Slovakia	Q3 2023	Q4 2023	900/2,100 MHz	New award procedure (auction)
Czech Republic	Q3 2023	Q4 2023	900/1,800 MHz	Extension procedure
Hungary	Q3 2023	Q4 2023	26 GHz	Details tbd

^a SMRA: simultaneous (electronic) multi-round auction with ascending, parallel bids for all available frequency bands.

^b Tender procedure (beauty contest auction) offering a competitive selection process for assigning scarce frequencies.

Agreements on spectrum licenses

In the United States, on August 8, 2022, T-Mobile US entered into agreements with **Channel 51 License** and **LB License** for the acquisition of licenses in the 600 MHz spectrum for an aggregate purchase price of USD 3.5 billion (EUR 3.4 billion). On March 30, 2023, the contractual parties further agreed that the transaction be divided into two separate tranches. The transfer of the licenses in accordance with the agreements is subject to regulatory approvals and certain other customary closing conditions. The first tranche is expected to be concluded by the end of 2023, while the second tranche is expected to be concluded in 2024.

On July 1, 2020, T-Mobile US and **DISH Network Corporation** (DISH) entered into an agreement on the sale of spectrum licenses, under which DISH receives an option to purchase certain 800 MHz spectrum licenses from T-Mobile US for USD 3.6 billion (EUR 3.5 billion). The transaction is subject to approval by the Federal Communications Commission (FCC). Pursuant to the agreement, the application for approval would have had to be filed with the FCC at the latest by June 1, 2023. As of July 27, 2023, DISH has not fulfilled this obligation. At the request of the U.S. Department of Justice, T-Mobile US agreed not to take action to terminate the agreement until August 11, 2023. If the application is filed with the FCC before this date, and the FCC subsequently approves the transaction, the contractual parties are obligated to close the transaction within five days of the FCC's approval. If DISH were to be in breach of contract, it would have to pay a contractual penalty of USD 72 million to T-Mobile US. However, should the transaction not be closed by April 1, 2024, without breach of contract, both parties are entitled to terminate the agreement. In this case, DISH would not be required to pay a contractual penalty. If DISH does not exercise its option to purchase the 800 MHz spectrum licenses, T-Mobile US is obligated to put the licenses up for sale at auction. Should bidding not reach the defined minimum purchase price of USD 3.6 billion, T-Mobile US would be released from its obligation to sell the licenses.

Development of business in the Group

This section provides important additional information and explains recent changes in the significant events compared to those described in the 2022 combined management report ([2022 Annual Report](#)), and looks at the effects of these changes on the development of business in the Group. In the section "[The economic environment](#)," we also focus on macroeconomic developments in the first half of 2023. For more information on global economic developments and the associated business risks, please refer to the section "[Risks and opportunities](#)."

For further information on significant events in the 2022 financial year, please refer to the sections "Group organization," "Management of the Group," and "Development of business in the Group" in the 2022 combined management report ([2022 Annual Report](#)).

Presentation of GD Towers according to the management approach. The GD Towers business entity had been recognized in the interim consolidated financial statements as a discontinued operation from the third quarter of 2022 until its sale on February 1, 2023. In the interim Group management report, we include the contributions by GD Towers in the results of operations according to the management approach for the period mentioned.

For further information on the sale and the presentation of GD Towers according to the management approach, including a reconciliation to the consolidated income statement, please refer to the section "[Group organization, strategy, and management](#)."

Results of operations of the Group

millions of €								
	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Net revenue^a	55,060	55,634	(1.0)	27,839	27,221	27,888	(2.4)	114,413
Service revenue^{a, b}	45,767	44,666	2.5	22,814	22,952	22,633	1.4	91,988
EBITDA AL (adjusted for special factors)	20,002	19,763	1.2	9,963	10,038	9,891	1.5	40,208
EBITDA AL	31,780	18,539	71.4	22,364	9,416	7,453	26.3	35,989
Depreciation, amortization and impairment losses	(11,900)	(14,335)	17.0	(6,030)	(5,869)	(7,570)	22.5	(27,827)
Profit (loss) from operations (EBIT)	23,222	8,684	n.a.	18,015	5,207	2,356	n.a.	16,159
Profit (loss) from financial activities	(2,954)	(1,523)	(94.0)	(1,331)	(1,623)	(634)	n.a.	(4,455)
Profit (loss) before income taxes	20,269	7,160	n.a.	16,685	3,584	1,723	n.a.	11,703
Net profit (loss)	16,899	5,409	n.a.	15,360	1,539	1,460	5.4	8,001
Net profit (loss) (adjusted for special factors)	3,846	4,683	(17.9)	1,959	1,887	2,445	(22.8)	9,081
Earnings per share (basic and diluted) €	3.40	1.09	n.a.	3.09	0.31	0.29	6.9	1.61
Adjusted earnings per share (basic and diluted) €	0.77	0.94	(18.1)	0.39	0.38	0.49	(22.4)	1.83

^a As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

^b As of January 1, 2023, the definition of service revenue was extended. Prior-year comparatives were adjusted retrospectively.

In order to increase the informative value of the prior-year comparatives based on changes to the Company's structure or exchange rate effects, we also describe selected figures in organic terms, by adjusting the figures for the prior-year period for changes in the composition of the Group, exchange rate effects, and other effects. Due to changes in the composition of the Group, the figures for the prior-year period presented on an organic basis were reduced in the Group Development operating segment in connection with the sale of T-Mobile Netherlands as of March 31, 2022, of GD Towers as of February 1, 2023, and of the wireline business at T-Mobile US as of May 1, 2023. The net positive exchange rate effects were primarily attributable to the translation of U.S. dollars to euros.

Revenue, service revenue

In the first half of 2023, we generated net revenue of EUR 55.1 billion, a decrease of 1.0 % or EUR 0.6 billion year-on-year. In organic terms, revenue decreased only slightly by EUR 0.2 billion or 0.4 %, including positive net exchange rate effects of EUR 0.4 billion, with changes in the composition of the Group having a reducing effect of EUR 0.7 billion. High-value service revenue in the Group increased by EUR 1.1 billion or 2.5 % year-on-year to EUR 45.8 billion. In organic terms, service revenue increased by EUR 1.3 billion or 2.9 %.

Contribution of the segments to net revenue (according to the management approach)

millions of €

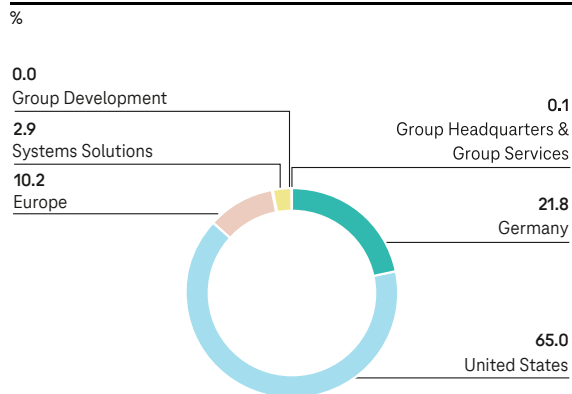
	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Germany	12,290	12,001	2.4	6,141	6,150	6,038	1.9	24,505
United States	35,817	36,320	(1.4)	18,262	17,555	18,440	(4.8)	75,436
Europe	5,683	5,411	5.0	2,784	2,899	2,729	6.2	11,158
Systems Solutions	1,905	1,869	1.9	946	959	942	1.8	3,811
Group Development	106	1,115	(90.5)	102	4	291	(98.6)	1,708
Group Headquarters & Group Services	1,130	1,220	(7.4)	578	552	616	(10.4)	2,407
Intersegment revenue	(1,873)	(2,302)	18.6	(975)	(898)	(1,169)	23.2	(4,612)
Net revenue^a	55,060	55,634	(1.0)	27,839	27,221	27,888	(2.4)	114,413

^a As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

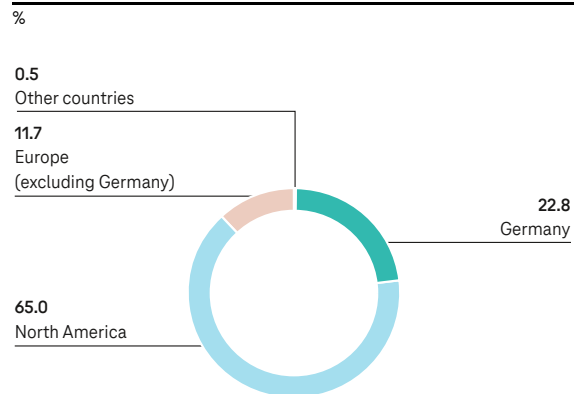
The loss of the value contributions of the sold entities T-Mobile Netherlands and GD Towers had a significant negative impact on year-on-year revenue development in the Group Development operating segment. In organic terms, however, revenue increased by 3.1%. In our United States operating segment, revenue was down 1.4 % against the prior-year level, due in part to exchange rate effects. In organic terms, it declined by 2.2 %. This was attributable to lower terminal equipment revenue, which was only partially offset by higher service revenue. The other operating segments recorded positive revenue trends. Revenue in our home market of Germany was up on the prior-year level, increasing by 2.4 %. In organic terms, revenue grew by 1.7 % year-on-year. This was mainly driven by growth in service revenues in the fixed-network core business and in mobile communications. Another revenue driver was the partnership business. In our Europe operating segment, revenue increased by 5.0 % year-on-year. In organic terms, too, revenue increased by 5.0 %, primarily attributable to the increase in higher-margin service revenues in the mobile business. Revenue in our Systems Solutions operating segment was up 1.9 % year-on-year; in organic terms, it was up 4.6 %. This positive revenue trend was mainly driven by growth in the Digital, Road Charging, and Advisory portfolio areas.

For further information on revenue development in our segments, please refer to the section "[Development of business in the operating segments.](#)"

Contribution of the segments to net revenue^{a, b}



Breakdown of revenue by region^b



^a For further information on net revenue, please refer to the section “Segment reporting” in the interim consolidated financial statements.

^b As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

At 65.0 %, our United States operating segment provided by far the largest contribution to net revenue of the Group. This was 0.3 percentage points below the level in the prior-year period. The proportion of net revenue generated internationally decreased from 77.7 % to 77.2 %.

Adjusted EBITDA AL, EBITDA AL

Adjusted EBITDA AL increased year-on-year by EUR 0.2 billion or 1.2 % to EUR 20.0 billion in the first half of 2023. In organic terms, adjusted EBITDA AL increased by EUR 0.5 billion or 2.4 %, including positive net exchange rate effects of EUR 0.1 billion, and with changes in the composition of the Group having a net reducing effect of EUR 0.4 billion. Adjusted core EBITDA AL, i.e., adjusted EBITDA AL excluding revenue from terminal equipment leases in the United States, thereby presenting operational development undistorted by the strategic withdrawal from the terminal equipment lease business, increased by EUR 0.8 billion or 4.4 % to EUR 19.8 billion.

Contribution of the segments to adjusted Group EBITDA AL (according to the management approach)

millions of €								
	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Germany	5,016	4,823	4.0	2,489	2,528	2,429	4.1	9,837
United States	13,090	12,509	4.6	6,536	6,554	6,337	3.4	25,614
Europe	2,007	1,961	2.3	983	1,024	986	3.9	3,964
Systems Solutions	159	147	8.2	75	84	79	6.3	284
Group Development	60	519	(88.4)	65	(5)	164	n.a.	964
Group Headquarters & Group Services	(317)	(185)	(71.4)	(176)	(141)	(100)	(41.0)	(437)
Reconciliation	(14)	(11)	(27.3)	(9)	(5)	(3)	(66.7)	(17)
EBITDA AL (adjusted for special factors)	20,002	19,763	1.2	9,963	10,038	9,891	1.5	40,208

All operating segments – with the exception of Group Development due to the aforementioned loss of the value contributions of the sold units – made a positive contribution to the development of adjusted EBITDA AL. Our Germany operating segment contributed to the increase thanks to high-value revenue growth and improved cost efficiency with 4.0 % higher adjusted EBITDA AL; in organic terms, it increased by 3.0 %. In our United States operating segment, adjusted EBITDA AL increased by 4.6 %, due in part to exchange rate effects. But also in organic terms, adjusted EBITDA AL grew by 3.1 % year-on-year. Adjusted core EBITDA AL at T-Mobile US increased by EUR 1.2 billion or 10.1 % to EUR 12.9 billion. Adjusted EBITDA AL in our Europe operating segment increased by 2.3 %. In organic terms, adjusted EBITDA AL grew by 1.9 %, again making a positive contribution to earnings, with a positive net margin more than sufficient to offset the higher indirect costs. In our Systems Solutions operating segment, adjusted EBITDA AL increased by 8.2 % or, in organic terms, by 3.2 %. Efficiency effects from the transformation program and increased revenue in the Digital and Road Charging portfolio areas exceeded the decline in earnings in the Cloud portfolio area, which includes the traditional IT infrastructure business.

EBITDA AL increased by EUR 13.2 billion year-on-year to EUR 31.8 billion, with special factors affecting EBITDA AL increasing by EUR 13.0 billion to EUR 11.8 billion. Net income of EUR 12.4 billion was recorded as special factors under effects of deconsolidations, disposals, and acquisitions. The deconsolidation of GD Towers as of February 1, 2023 gave rise to income of EUR 12.9 billion. Net expenses of EUR 0.6 billion, mainly in connection with integration costs as a result of the merger of T-Mobile US and Sprint, had an offsetting effect. These expenses include in particular expenses from the integration of IT systems, expenses in connection with the decommissioning of the former Sprint's wireless network, and additional depreciation and impairment losses from reductions in the useful lives of leased network technology for cell sites in the United States. In the prior-year period, net expenses of EUR 0.1 billion were recorded as special factors under effects of deconsolidations, disposals and acquisitions. Of this income, EUR 1.7 billion resulted from the deconsolidation of GlasfaserPlus and a further EUR 0.9 billion from the sale of T-Mobile Netherlands. Net expenses of EUR 2.8 billion, mainly in connection with integration costs as a result of the merger of T-Mobile US and Sprint, had an offsetting effect. Expenses incurred in connection with staff restructuring were on a par with the prior-year level at EUR 0.6 billion. No significant impairment losses or other special factors affecting EBITDA AL were recognized in the reporting period. In the prior year, the impairment losses classified as special factors amounted to EUR 0.2 billion and mainly related to right-of-use assets used in connection with the former Sprint's fiber-optic-based wireline network. In the prior year, other special factors affecting EBITDA AL included expenses of EUR 0.4 billion for the settlement reached and the further proceedings pending in consequence of the cyberattack on T-Mobile US in August 2021, offset by payments on account from insurance companies of EUR 0.1 billion in connection with damage sustained in the catastrophic flooding in July 2021.

For further information on the development of (adjusted) EBITDA AL in our segments, please refer to the section "[Development of business in the operating segments.](#)"

Profit/loss from operations (EBIT)

Group EBIT increased to EUR 23.2 billion, up EUR 14.5 billion against the level of the prior-year period. This change was primarily due to the deconsolidation gain from the sale of GD Towers. At EUR 11.9 billion, depreciation, amortization and impairment losses on intangible assets, property, plant and equipment, and right-of-use assets were EUR 2.4 billion lower in the first half of 2023 than in the prior-year period, with the decrease being mainly attributable to the United States and Group Development operating segments. Depreciation and amortization at T-Mobile US were lower due to the ongoing strategic withdrawal from the terminal equipment lease business. Depreciation and amortization also decreased due to the complete write-off of certain 4G network components, including assets affected by the decommissioning of the former Sprint's legacy CDMA and LTE networks in 2022. The decrease was offset by increased depreciation and amortization in connection with the further build-out of the nationwide 5G network in the United States. In the Group Development operating segment, depreciation of property, plant and equipment and right-of-use assets were down on the prior-year level in connection with the fact that GD Towers had been held for sale until it was sold and accordingly the related depreciation had been suspended, and in connection with its subsequent sale. By contrast, a further reduction in the useful life of leased network technology for cell sites following the business combination of T-Mobile US and Sprint increased depreciation of the corresponding right-of-use assets by EUR 0.2 billion. At EUR 0.1 billion, no significant impairment losses were recorded in the reporting period. The impairment losses recorded in the prior-year period amounted to EUR 0.5 billion and were mainly attributable to the former Sprint's fiber-optic-based wireline assets in the United States operating segment.

For information on the sale and the presentation of GD Towers according to the management approach, including a reconciliation for the consolidated income statement, please refer to the section "[Group organization, strategy, and management.](#)"

Profit before income taxes

Profit before income taxes increased by EUR 13.1 billion to EUR 20.3 billion. Loss from financial activities increased year-on-year from EUR 1.5 billion to EUR 3.0 billion, with other financial income declining from EUR 1.0 billion to an expense of EUR 0.1 billion, in particular in connection with the interest component from the measurement of provisions and liabilities. This decrease was mainly attributable to the subsequent measurement using actuarial principles of the present value of the provision recognized for the Civil Service Health Insurance Fund. Gains/losses from financial instruments also declined year-on-year by EUR 0.3 billion to EUR 0.1 billion, partly due to less pronounced positive measurement effects compared with the prior-year period from a forward transaction which was terminated early in the first quarter of 2023 to hedge the price of acquiring T-Mobile US shares in the future. Finance costs increased from EUR 2.5 billion to EUR 2.9 billion, mainly due to the sale and leaseback of passive network infrastructure in Germany and Austria in connection with the sale of GD Towers, which resulted in an increase in the carrying amounts of the lease liabilities, and due to an increase in the average interest rates of our financial liabilities.

Net profit, adjusted net profit

Net profit increased year-on-year by EUR 11.5 billion to EUR 16.9 billion. The tax expense decreased by EUR 0.2 billion to EUR 1.2 billion. The tax rate was significantly reduced in the first half of 2023 by the realization of tax-free income from the sale of GD Towers. Taxes were furthermore reduced by deferred tax effects arising in connection with the sale-and-leaseback transaction concluded. Profit attributable to non-controlling interests increased by EUR 1.8 billion to EUR 2.1 billion. This increase was almost entirely attributable to our United States operating segment. Excluding special factors, which had a positive overall effect of EUR 13.1 billion on net profit, adjusted net profit amounted to EUR 3.8 billion in the first half of 2023, compared with EUR 4.7 billion in the prior-year period. The increase in loss from financial activities in particular had a decreasing effect.

For further information on tax expense, please refer to the section "[Income taxes](#)" in the interim consolidated financial statements.

Earnings per share, adjusted earnings per share

Earnings per share is calculated as net profit divided by the weighted average number of ordinary shares outstanding, which totaled 4,975 million as of June 30, 2023. This resulted in earnings per share of EUR 3.40, which was mainly affected by the gain on the sale of GD Towers. In the prior-year period, earnings per share had been EUR 1.09. Earnings per share adjusted for special factors affecting net profit amounted to EUR 0.77 compared with EUR 0.94 in the prior-year period.

Employees

Headcount development

	June 30, 2023	Dec. 31, 2022	Change	Change %	June 30, 2022
FTEs in the Group	205,212	206,759	(1,547)	(0.7)	210,595
Of which: civil servants (in Germany, with an active service relationship)	7,585	8,381	(796)	(9.5)	8,889
Germany	60,596	59,014	1,582	2.7	60,401
United States	66,581	67,088	(507)	(0.8)	68,826
Europe	33,645	34,083	(438)	(1.3)	34,689
Systems Solutions	25,976	27,392	(1,416)	(5.2)	26,580
Group Development	103	828	(725)	(87.6)	829
Of which: GD Towers	0	762	(762)	(100.0)	754
Group Headquarters & Group Services	18,309	18,353	(44)	(0.2)	19,270

As of June 30, 2023, the Group's headcount was down slightly compared with the end of 2022, by 0.7%. In our Germany operating segment, the number of employees increased by 2.7% against year-end 2022, mainly due to the transfer of employees of Multimedia Solutions (MMS) from the Systems Solutions operating segment. The total number of full-time equivalent employees in the United States operating segment decreased slightly compared to year-end 2022 – primarily due to headcount rationalization to manage costs. In our Europe operating segment, the headcount was down by 1.3% compared with the end of the prior year, in particular in Slovakia, Greece, Hungary, and Croatia. The headcount in our Systems Solutions operating segment was down 5.2% against year-end 2022, mainly due to the transfer of MMS into the Germany operating segment. In the Group Development operating segment, the sharp year-on-year decrease in headcount of 87.6% was mainly due to the sale of GD Towers as of February 1, 2023. The headcount in the Group Headquarters & Group Services segment as of June 30, 2023 was at the same level as at year-end 2022. The continued staff restructuring at Vivento offset the increase in the number of employees in the Technology and Innovation Board of Management department.

Reconciliations of financial performance indicators from the IFRS consolidated financial statements

A reconciliation of the definition of EBITDA to the “after leases” indicator (EBITDA AL) can be found in the following table:

millions of €								
	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
EBITDA	35,122	23,019	52.6	24,046	11,077	9,927	11.6	43,986
Depreciation of right-of-use assets ^a	(2,453)	(3,770)	34.9	(1,246)	(1,207)	(2,116)	43.0	(6,507)
Interest expenses on recognized lease liabilities ^a	(888)	(710)	(25.1)	(435)	(453)	(358)	(26.5)	(1,489)
EBITDA AL	31,780	18,539	71.4	22,364	9,416	7,453	26.3	35,989
Special factors affecting EBITDA AL	11,779	(1,224)	n.a.	12,401	(622)	(2,438)	74.5	(4,219)
EBITDA AL (adjusted for special factors)	20,002	19,763	1.2	9,963	10,038	9,891	1.5	40,208

^a Excluding finance leases at T-Mobile US.

The following table presents the reconciliation of net profit to net profit adjusted for special factors:

millions of €								
	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Net profit (loss)	16,899	5,409	n.a.	15,360	1,539	1,460	5.4	8,001
Special factors affecting EBITDA AL	11,779	(1,224)	n.a.	12,401	(622)	(2,438)	74.5	(4,219)
Staff-related measures	(587)	(569)	(3.2)	(232)	(355)	(386)	8.0	(1,230)
Non-staff-related restructuring	(17)	(46)	63.0	(10)	(7)	(37)	81.1	(175)
Effects of deconsolidations, disposals and acquisitions	12,384	(99)	n.a.	12,623	(240)	(1,433)	83.3	(2,256)
Impairment losses	(8)	(201)	96.0	(1)	(7)	(197)	96.4	(276)
Other	7	(308)	n.a.	21	(14)	(385)	96.4	(283)
Special factors affecting net profit	1,275	1,949	(34.6)	1,000	274	1,453	(81.1)	3,139
Impairment losses	(48)	(341)	85.9	(17)	(31)	(310)	90.0	(989)
Profit (loss) from financial activities	(2)	24	n.a.	0	(2)	3	n.a.	(487)
Income taxes	1,029	782	31.6	876	154	778	(80.2)	1,936
Non-controlling interests	296	1,484	(80.1)	141	154	982	(84.3)	2,680
Special factors	13,053	726	n.a.	13,401	(348)	(985)	64.7	(1,080)
Net profit (loss) (adjusted for special factors)	3,846	4,683	(17.9)	1,959	1,887	2,445	(22.8)	9,081

The following table presents a reconciliation of EBITDA AL, EBIT, and net profit to the respective figures adjusted for special factors:

millions of €							
	EBITDA AL H1 2023	EBIT H1 2023	EBITDA AL H1 2022	EBIT H1 2022	EBITDA AL FY 2022	EBIT FY 2022	
EBITDA AL/EBIT	31,780	23,222	18,539	8,684	35,989	16,159	
Germany	(271)	(271)	1,406	1,406	1,162	1,162	
Staff-related measures	(256)	(256)	(277)	(277)	(523)	(523)	
Non-staff-related restructuring	(7)	(7)	(3)	(3)	(8)	(8)	
Effects of deconsolidations, disposals and acquisitions	1	1	1,634	1,634	1,608	1,608	
Impairment losses	0	0	0	0	0	0	
Other	(9)	(9)	51	51	84	84	

millions of €	EBITDA AL H1 2023	EBIT H1 2023	EBITDA AL H1 2022	EBIT H1 2022	EBITDA AL FY 2022	EBIT FY 2022
United States	(722)	(732)	(3,454)	(3,745)	(5,949)	(6,637)
Staff-related measures	(172)	(172)	(124)	(124)	(352)	(352)
Non-staff-related restructuring	0	0	0	0	0	0
Effects of deconsolidations, disposals and acquisitions	(582)	(564)	(2,750)	(2,791)	(4,956)	(5,084)
Impairment losses	(8)	(36)	(200)	(452)	(275)	(836)
Other	40	40	(379)	(379)	(366)	(366)
Europe	(45)	(45)	(18)	(18)	(31)	(147)
Staff-related measures	(38)	(38)	(44)	(44)	(70)	(70)
Non-staff-related restructuring	0	0	0	0	0	0
Effects of deconsolidations, disposals and acquisitions	4	4	5	5	12	12
Impairment losses	0	0	0	0	0	(117)
Other	(11)	(11)	21	21	27	27
Systems Solutions	(51)	(61)	(66)	(85)	(159)	(270)
Staff-related measures	(40)	(40)	(46)	(46)	(107)	(107)
Non-staff-related restructuring	(1)	(1)	0	0	(5)	(5)
Effects of deconsolidations, disposals and acquisitions	1	1	(2)	(2)	(2)	(2)
Impairment losses	0	(11)	0	(18)	0	(111)
Other	(11)	(11)	(17)	(17)	(44)	(44)
Group Development	12,947	12,947	906	906	992	992
Staff-related measures	(3)	(3)	(2)	(2)	(10)	(10)
Non-staff-related restructuring	0	0	0	0	0	0
Effects of deconsolidations, disposals and acquisitions	12,951	12,951	909	909	1,003	1,003
Impairment losses	0	0	0	0	0	0
Other	0	0	(1)	(1)	(1)	(1)
Group Headquarters & Group Services	(80)	(81)	1	(21)	(234)	(270)
Staff-related measures	(79)	(79)	(76)	(76)	(168)	(168)
Non-staff-related restructuring	(9)	(9)	(43)	(43)	(162)	(162)
Effects of deconsolidations, disposals and acquisitions	9	9	104	104	80	80
Impairment losses	0	0	(1)	(23)	0	(36)
Other	(1)	(1)	17	17	17	17
Group	11,779	11,757	(1,224)	(1,557)	(4,219)	(5,171)
Staff-related measures	(587)	(587)	(569)	(569)	(1,230)	(1,230)
Non-staff-related restructuring	(17)	(17)	(46)	(46)	(175)	(175)
Effects of deconsolidations, disposals and acquisitions	12,384	12,401	(99)	(140)	(2,256)	(2,384)
Impairment losses	(8)	(47)	(201)	(494)	(276)	(1,100)
Other	7	7	(308)	(308)	(283)	(283)
EBITDA AL/EBIT (adjusted for special factors)	20,002	11,465	19,763	10,240	40,208	21,330
Profit (loss) from financial activities (adjusted for special factors)		(2,925)		(1,540)		(3,931)
Profit (loss) before income taxes (adjusted for special factors)		8,541		8,700		17,399
Income taxes (adjusted for special factors)		(2,264)		(2,193)		(4,157)
Profit (loss) (adjusted for special factors)		6,276		6,507		13,242
Profit (loss) (adjusted for special factors) attributable to						
Owners of the parent (net profit (loss)) (adjusted for special factors)		3,846		4,683		9,081
Non-controlling interests (adjusted for special factors)		2,431		1,824		4,161

Financial position of the Group

Condensed consolidated statement of financial position

millions of €

	June 30, 2023	%	Dec. 31, 2022	Change	June 30, 2022
Assets					
Cash and cash equivalents	8,742	2.9	5,767	2,975	5,281
Trade receivables	15,750	5.3	16,766	(1,016)	16,853
Intangible assets	138,026	46.1	140,600	(2,574)	144,544
Property, plant and equipment	65,840	22.0	65,729	111	65,185
Right-of-use assets	34,312	11.4	33,727	585	38,061
Investments accounted for using the equity method	7,349	2.5	1,318	6,031	1,995
Current and non-current financial assets	10,206	3.4	9,910	296	9,394
Deferred tax assets	7,251	2.4	8,316	(1,065)	8,604
Non-current assets and disposal groups held for sale	122	0.0	4,683	(4,561)	99
Miscellaneous assets	12,103	4.0	11,774	329	11,670
Total assets	299,701	100.0	298,590	1,111	301,686
Liabilities and shareholders' equity					
Current and non-current financial liabilities	109,980	36.7	113,030	(3,050)	114,506
Current and non-current lease liabilities	41,999	14.0	38,792	3,207	42,525
Trade and other payables	10,384	3.5	12,035	(1,651)	11,179
Provisions for pensions and other employee benefits	3,870	1.3	4,150	(280)	3,913
Current and non-current other provisions	7,159	2.4	8,204	(1,045)	8,378
Deferred tax liabilities	22,159	7.4	22,800	(641)	22,925
Liabilities directly associated with non-current assets and disposal groups held for sale	0	0.0	3,347	(3,347)	0
Miscellaneous liabilities	9,751	3.3	8,912	839	9,768
Shareholders' equity	94,399	31.5	87,320	7,079	88,492
Total liabilities and shareholders' equity	299,701	100.0	298,590	1,111	301,686

Total assets amounted to EUR 299.7 billion as of June 30, 2023, up by EUR 1.1 billion against December 31, 2022. The main contributing factors were the cash proceeds from the sale of GD Towers, the sale-and-leaseback transaction concluded in this connection to lease the sold passive network infrastructure in Germany and Austria, and the inclusion of the remaining 49.0 % stake. Total assets were reduced in connection with the derecognition of the assets and liabilities that had been fully consolidated until the transaction was closed. Exchange rate effects, primarily from the translation of U.S. dollars into euros, decreased the carrying amount of total assets.

For further information on the sale of GD Towers, please refer to the section "Group organization, strategy, and management."

On the assets side, **trade receivables** amounted to EUR 15.8 billion, down by EUR 1.0 billion against the 2022 year-end. This was due to lower receivables in the United States and Germany operating segments. Exchange rate effects, mainly from the translation of U.S. dollars into euros, also decreased the carrying amount. By contrast, receivables increased in the Europe operating segment.

Intangible assets decreased by EUR 2.6 billion to EUR 138.0 billion, mainly due to amortization and impairment losses of EUR 3.3 billion. Exchange rate effects, primarily from the translation of U.S. dollars into euros, also decreased the carrying amount by EUR 1.8 billion. By contrast, additions increased the carrying amount by EUR 2.5 billion. Of these additions, EUR 0.3 billion related to the acquisition of mobile spectrum in the Europe and United States operating segments.

Property, plant and equipment increased by EUR 0.1 billion compared to December 31, 2022 to EUR 65.8 billion. Additions, primarily for the upgrade and build-out of the network (broadband, fiber-optic, and mobile infrastructure build-out) increased the carrying amount by EUR 6.4 billion. Depreciation charges of EUR 5.9 billion had a decreasing effect. Exchange rate effects of EUR 0.4 billion, primarily from the translation of U.S. dollars into euros, and disposals of EUR 0.2 billion also reduced the carrying amount.

Compared with December 31, 2022, **right-of-use assets** increased by EUR 0.6 billion to EUR 34.3 billion. The carrying amount was increased by additions of EUR 4.0 billion, mainly as a result of the sale and leaseback of passive network infrastructure in Germany and Austria in connection with the sale of GD Towers. In this context, retained right-of-use assets of EUR 2.0 billion were recognized in the consolidated statement of financial position. Depreciation and impairment losses decreased the carrying amount by EUR 2.8 billion. Exchange rate effects of EUR 0.5 billion, primarily from the translation of U.S. dollars into euros, and disposals of EUR 0.1 billion reduced the carrying amount.

Investments accounted for using the equity method increased by EUR 6.0 billion compared to December 31, 2022, to EUR 7.3 billion, essentially as a result of the sale of the 51.0 % stake in GD Towers. Following the loss of control pursuant to the IFRSs as a result of the transaction, the companies were deconsolidated as of February 1, 2023. Since this date, the remaining 49.0 % of the shares have been included in the consolidated financial statements as an investment accounted for using the equity method. The carrying amount of the investment amounted to EUR 6.1 billion as of June 30, 2023.

Current and non-current **financial assets** increased by EUR 0.3 billion to EUR 10.2 billion. The net total of originated loans and receivables increased by EUR 0.3 billion to EUR 4.6 billion. The carrying amount was also increased by an existing shareholder loan to GD Towers, which must be reported in the consolidated statement of financial position as a result of the deconsolidation of the companies. As of June 30, 2023, this loan had a carrying amount of EUR 0.3 billion. In addition, government bonds were bought during the course of the year under short-term investments. As of June 30, 2023, they had a carrying amount of EUR 0.2 billion.

Non-current assets and disposal groups held for sale decreased by EUR 4.6 billion compared with December 31, 2022 to EUR 0.1 billion. The sale of GD Towers as of February 1, 2023 reduced the carrying amount by EUR 4.2 billion, and the sale of the wireline business at T-Mobile US as of May 1, 2023 by EUR 0.3 billion. The corresponding assets had previously been reported as held for sale on account of the sales agreements concluded.

For further information on the corporate transactions, please refer to the section [“Group organization, strategy, and management.”](#)

Miscellaneous assets increased by EUR 0.3 billion to EUR 12.1 billion. Current and non-current other assets contributed EUR 0.5 billion to this increase, due in part to an increase in various advance payments, mainly in connection with agreements on services for certain mobile communications equipment. In addition, contract assets and capitalized contract costs each increased by EUR 0.1 billion. By contrast, inventories declined by EUR 0.4 billion, mainly due to the sale of older terminal equipment and to reduced stocks as a result of closures of former Sprint sites in the United States operating segment.

On the liabilities and shareholders' equity side, current and non-current **financial liabilities** decreased by EUR 3.1 billion compared with the end of 2022 to a total of EUR 110.0 billion. The carrying amount of bonds and other securitized liabilities decreased by EUR 2.0 billion, with exchange rate effects, in particular from the translation of U.S. dollars into euros, accounting for EUR 1.2 billion of this decrease. Early repayments in the Group by way of early buy-backs in February and March 2023 of EUR, GBP, and USD bonds with a total volume of EUR 3.3 billion, and scheduled repayments of EUR bonds of EUR 1.3 billion also reduced the carrying amount. Net repayments of commercial paper also decreased the carrying amount by EUR 2.3 billion. The carrying amount was increased by the senior notes issued in the reporting period by T-Mobile US with a total volume of USD 6.5 billion (EUR 6.0 billion). In addition, the carrying amounts of liabilities to banks, liabilities with the right of creditors to priority repayment in the event of default, and derivative financial liabilities decreased by EUR 1.0 billion overall.

Current and non-current **lease liabilities** increased by EUR 3.2 billion to EUR 42.0 billion compared with December 31, 2022, mainly as a result of the sale and leaseback of passive network infrastructure in Germany and Austria in connection with the sale of GD Towers. As a result of this transaction, lease liabilities increased by EUR 5.0 billion. By contrast, lease liabilities in the United States operating segment decreased by EUR 1.1 billion due to the decommissioning of the former Sprint's wireless network, the closure of former Sprint shops, and a decline in network and build-out investments, primarily on account of higher capital efficiency resulting from the accelerated build-out of the nationwide 5G network in the prior year. Exchange rate effects, in particular from the translation of U.S. dollars into euros, reduced the carrying amount by EUR 0.5 billion.

Trade and other payables decreased by EUR 1.7 billion to EUR 10.4 billion, due in particular to lower liabilities in the United States operating segment, primarily attributable to a seasonally lower procurement volume and exchange rate effects with a reducing effect on the carrying amount. By contrast, the Germany operating segment recorded an increase in liabilities.

Provisions for pensions and other employee benefits decreased by EUR 0.3 billion compared with December 31, 2022 to EUR 3.9 billion, mainly due to an increase in the fair values of plan assets. The decline in the discount rate compared with December 31, 2022 had an offsetting effect. Overall, the remeasurement of defined benefit plans resulted in an actuarial gain of EUR 0.2 billion to be recognized directly in equity.

Current and non-current **other provisions** decreased by EUR 1.0 billion compared with the end of 2022 to EUR 7.2 billion. Other provisions for personnel costs decreased by EUR 0.3 billion, mainly in connection with the performance-based remuneration components for the prior year paid out to employees in the first half of 2023. By contrast, other provisions for personnel costs recognized for the Civil Service Health Insurance Fund (Postbeamtenkrankenkasse – PBeaKK) increased as a result of the subsequent measurement of the present value determined using actuarial principles due to the decline in the interest rate level. Provisions for procurement and sales support decreased by EUR 0.3 billion, mainly in connection with the bonuses paid out to sales partners in the United States operating segment. Provisions for restoration obligations also decreased by EUR 0.2 billion, due in particular to the decommissioning of the former Sprint mobile network and due to shop closures.

Liabilities directly associated with non-current assets and disposal groups held for sale decreased by EUR 3.3 billion against December 31, 2022 to EUR 0.0 billion. The sale of GD Towers as of February 1, 2023 reduced the carrying amount by EUR 3.0 billion, and the sale of the wireline business at T-Mobile US as of May 1, 2023 by EUR 0.4 billion. The corresponding liabilities had previously been reported as held for sale on account of the sales agreements concluded.

For further information on corporate transactions, please refer to the section [“Group organization, strategy, and management.”](#)

Miscellaneous liabilities increased by EUR 0.8 billion compared to December 31, 2022 to EUR 9.8 billion, mainly due to an increase in other liabilities of EUR 0.4 billion, driven by an increase in liabilities from other taxes. In addition, contract liabilities increased by EUR 0.3 billion and income tax liabilities by EUR 0.1 billion.

Shareholders’ equity increased from EUR 87.3 billion as of December 31, 2022 to EUR 94.4 billion, with profit of EUR 19.0 billion and capital increases from share-based payments of EUR 0.2 billion having an increasing effect. By contrast, transactions with owners reduced shareholders’ equity by EUR 7.9 billion, mainly in connection with the share buy-back program at T-Mobile US. Shareholders’ equity was reduced in connection with dividend payments for the 2022 financial year to Deutsche Telekom AG shareholders in the amount of EUR 3.5 billion and to other shareholders of subsidiaries in the amount of EUR 0.2 billion. Other comprehensive income decreased the carrying amount by EUR 0.6 billion.

For further information on the statement of financial position, please refer to the section [“Selected notes to the consolidated statement of financial position”](#) in the interim consolidated financial statements.

Calculation of net debt

millions of €

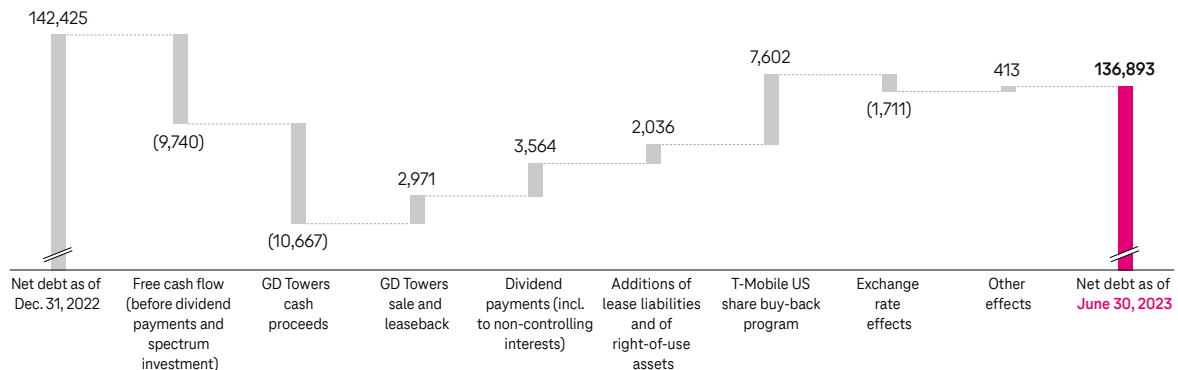
	June 30, 2023	Dec. 31, 2022	Change	Change %	June 30, 2022
Bonds and other securitized liabilities	91,822	93,802	(1,980)	(2.1)	95,953
Liabilities to banks	3,610	4,122	(512)	(12.4)	3,999
Other financial liabilities	14,548	15,107	(559)	(3.7)	14,554
Lease liabilities	41,999	41,063	936	2.3	42,525
Financial liabilities and lease liabilities	151,979	154,093	(2,114)	(1.4)	157,032
Accrued interest	(1,036)	(999)	(37)	(3.7)	(1,023)
Other	(1,046)	(805)	(241)	(29.9)	(994)
Gross debt	149,897	152,289	(2,392)	(1.6)	155,015
Cash and cash equivalents	8,742	5,767	2,975	51.6	5,281
Derivative financial assets	2,174	2,273	(99)	(4.4)	2,369
Other financial assets	2,088	1,824	264	14.5	1,261
Net debt^a	136,893	142,425	(5,532)	(3.9)	146,104
Lease liabilities ^b	39,719	38,692	1,027	2.7	39,815
Net debt AL	97,174	103,733	(6,559)	(6.3)	106,289

^a Including net debt reported under liabilities directly associated with non-current assets and disposal groups held for sale.

^b Excluding finance leases at T-Mobile US.

Changes in net debt

millions of €



Other effects of EUR 0.4 billion included, among other factors, the acquisition of spectrum, share buy-backs at subsidiaries, and the recognition of liabilities for the acquisition of broadcasting rights.

For further information on the sale of GD Towers, please refer to the section “Group organization, strategy, and management.”

Calculation of free cash flow AL

millions of €

	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Net cash from operating activities	18,864	17,979	4.9	9,558	9,306	8,621	7.9	35,819
Cash outflows for investments in intangible assets	(2,441)	(4,679)	47.8	(1,187)	(1,254)	(1,128)	(11.2)	(7,551)
Cash outflows for investments in property, plant and equipment	(6,995)	(7,579)	7.7	(3,639)	(3,356)	(3,958)	15.2	(16,563)
Cash capex	(9,436)	(12,259)	23.0	(4,826)	(4,611)	(5,086)	9.3	(24,114)
Spectrum investment	255	2,616	(90.3)	67	189	102	85.3	3,096
Cash capex (before spectrum investment)	(9,181)	(9,642)	4.8	(4,759)	(4,422)	(4,984)	11.3	(21,019)
Proceeds from the disposal of intangible assets (excluding goodwill) and property, plant and equipment	57	84	(32.1)	23	34	34	0.0	439
Free cash flow (before dividend payments and spectrum investment)	9,740	8,421	15.7	4,822	4,918	3,671	34.0	15,239
Principal portion of repayment of lease liabilities ^a	(2,639)	(1,881)	(40.3)	(1,244)	(1,395)	(912)	(53.0)	(3,769)
Free cash flow AL (before dividend payments and spectrum investment)	7,101	6,540	8.6	3,579	3,522	2,759	27.7	11,470

^a Excluding finance leases at T-Mobile US.

Free cash flow AL (before dividend payments and spectrum investment) increased by EUR 0.6 billion year-on-year to EUR 7.1 billion. The following effects impacted on this development:

Net cash from operating activities increased by EUR 0.9 billion to EUR 18.9 billion on the back of the good business performance. Lower cash outflows in connection with the integration of Sprint in the United States also had an increasing effect. The increase in net interest payments of EUR 0.2 billion and the increase in tax payments of EUR 0.2 billion, in particular, had a reducing effect.

Cash capex (before spectrum investment) decreased from EUR 9.6 billion to EUR 9.2 billion. Cash capex in the United States operating segment decreased by EUR 1.0 billion to EUR 5.4 billion, mainly as a result of higher cash outflows in the prior year for the accelerated build-out of the 5G network and the integration of Sprint. In the Group Development operating segment, cash capex decreased, mainly due to the sales of T-Mobile Netherlands and GD Towers. In the Germany operating segment, capital expenditure totaled around EUR 2.3 billion in the first half of 2023, EUR 0.5 billion more than in the prior-year period, with much of this figure going towards the fiber-optic build-out. Cash outflows in the Europe operating segment increased by EUR 0.1 billion to EUR 0.9 billion, largely due to the timing of the allocation of capital expenditure. We continue to invest here

in the provision of broadband and fiber-optic technology and in 5G as part of our integrated network strategy. In the Systems Solutions operating segment, our capital expenditure was EUR 0.1 billion. The increase is mainly due to higher demand for on-board units in the Road Charging portfolio area and higher investments in the Digital portfolio area.

An increase of EUR 0.8 billion in cash outflows for the repayment of lease liabilities reduced free cash flow AL. This mainly related to leases in the United States and Germany operating segments.

For further information on the statement of cash flows, please refer to the section “Notes to the consolidated statement of cash flows” in the interim consolidated financial statements.

The rating of Deutsche Telekom AG

	Standard & Poor's	Moody's	Fitch
Long-term rating/outlook			
Dec. 31, 2022	BBB/positive	Baa1/stable	BBB+/stable
June 30, 2023	BBB+/stable	Baa1/stable	BBB+/stable
Short-term rating	A-2	P-2	F2

On May 19, 2023, the rating agency Standard & Poor's raised the **long-term rating** from BBB to BBB+ with a stable outlook. We are therefore a solid investment-grade company with access to the international capital markets.

For more information on Deutsche Telekom AG's rating, please refer to the section “Profitability and financial position of the Group” in the [2022 Annual Report](#).

Development of business in the operating segments

Germany

Customer development

thousands	June 30, 2023	Mar. 31, 2023	Change June 30, 2023/ Mar. 31, 2023 %	Dec. 31, 2022	Change June 30, 2023/ Dec. 31, 2022 %	June 30, 2022	Change June 30, 2023/ June 30, 2022 %
Mobile customers	57,695	56,067	2.9	54,249	6.4	54,551	5.8
Contract customers	24,391	24,037	1.5	23,791	2.5	23,402	4.2
Prepaid customers ^a	33,304	32,030	4.0	30,458	9.3	31,149	6.9
Fixed-network lines	17,332	17,349	(0.1)	17,363	(0.2)	17,437	(0.6)
Retail broadband lines	14,856	14,789	0.5	14,715	1.0	14,578	1.9
Of which: optical fiber ^b	12,486	12,238	2.0	12,112	3.1	10,836	15.2
Television (IPTV, satellite)	4,208	4,172	0.9	4,122	2.1	4,039	4.2
Unbundled local loop lines (ULLs)	2,877	3,017	(4.6)	3,136	(8.3)	3,351	(14.1)
Wholesale broadband lines	8,137	8,086	0.6	8,045	1.1	8,001	1.7
Of which: optical fiber	7,103	7,020	1.2	6,970	1.9	6,883	3.2

^a Due to a network switchover, a portion of our prepaid customers had been migrated to another provider by the end of the third quarter of 2022.

^b From June 1, 2022 until December 31, 2022, we migrated customers to fiber-optic lines under our “Turn customers into fans” (Kunden zu Fans machen) initiative. Around 1 million lines in total were upgraded as part of this initiative.

Total

In Germany we continue to be market leader both in terms of fixed-network and mobile revenues. This success is attributable to our high-performance networks, a broad product portfolio, and good service. We want to offer our customers a seamless and technology-neutral telecommunications experience. We regularly adapt our product portfolio to address the needs of our customers.

The fixed-network broadband market hosts a large number of players with differing infrastructures – from national through to regional providers. In order to consolidate our position on the market as Germany's leading telecommunications provider, we continue to add new offerings to our portfolio.

Mobile communications

The number of high-value mobile contract customers under the Telekom and congstar brands grew by 593 thousand customers overall. Sustained high demand for mobile rate plans with data volumes continues to drive this trend. The number of prepaid customers grew by 2.8 million against the start of the year, primarily from the automotive industry.

Fixed network

Demand remained high for our fiber-optic-based lines, with the total number increasing to 19.6 million since the end of 2022. Two key factors are driving this strong growth: demand for higher bandwidths, and the technical migration of customer lines to optical fiber under our “Turn customers into fans” (Kunden zu Fans machen) initiative, which concluded at the end of 2022.

The number of retail broadband lines remained at a high level, increasing by 141 thousand in the first half of 2023 to 14.9 million. 43 % of the customers subscribed to a rate plan with speeds of 100 Mbit/s or higher. We recorded an increase of 86 thousand in the number of TV customers compared with year-end 2022. The number of fixed-network lines stood at 17.3 million.

Wholesale

As of June 30, 2023, fiber-optic-based lines accounted for 64.5 % of all lines – 2.2 percentage points more than at the end of 2022. This growth is a result of the demand for our commitment agreements. Ongoing demand among retail customers for higher-bandwidth lines also contributed to the increase. The number of unbundled local loop lines decreased by 259 thousand compared with the end of the prior year, partly as a result of the shift to higher-value fiber-optic-based lines and partly from consumers switching to other providers. In addition, our wholesale customers are migrating their retail customers to their own fiber-optic-based lines. The total number of wholesale lines at the end of June 2023 was 11.0 million.

Development of operations^a

millions of €								
	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Revenue^b	12,290	12,001	2.4	6,141	6,150	6,038	1.9	24,505
Consumers	6,132	6,097	0.6	3,077	3,055	3,063	(0.3)	12,370
Business Customers	4,514	4,399	2.6	2,269	2,245	2,213	1.4	9,040
Wholesale	1,354	1,353	0.1	672	682	674	1.2	2,676
Other	290	152	90.8	123	167	89	87.6	419
Service revenue^b	10,901	10,645	2.4	5,417	5,484	5,356	2.4	21,533
EBITDA	4,992	6,242	(20.0)	2,483	2,509	2,221	13.0	11,025
Special factors affecting EBITDA	(271)	1,406	n.a.	(104)	(167)	(215)	22.3	1,162
EBITDA (adjusted for special factors)	5,263	4,836	8.8	2,587	2,676	2,436	9.9	9,864
EBITDA AL	4,745	6,229	(23.8)	2,385	2,360	2,214	6.6	10,998
Special factors affecting EBITDA AL	(271)	1,406	n.a.	(104)	(167)	(215)	22.3	1,162
EBITDA AL (adjusted for special factors)	5,016	4,823	4.0	2,489	2,528	2,429	4.1	9,837
EBITDA AL margin (adjusted for special factors) %	40.8	40.2		40.5	41.1	40.2		40.1
Depreciation, amortization and impairment losses	(2,090)	(1,992)	(4.9)	(1,036)	(1,054)	(995)	(5.9)	(4,019)
Profit (loss) from operations (EBIT)	2,902	4,250	(31.7)	1,447	1,455	1,226	18.7	7,006
EBIT margin %	23.6	35.4		23.6	23.7	20.3		28.6
Cash capex	(2,300)	(1,778)	(29.4)	(1,187)	(1,113)	(876)	(27.1)	(4,399)
Cash capex (before spectrum investment)	(2,300)	(1,778)	(29.4)	(1,187)	(1,113)	(876)	(27.1)	(4,399)

^a As of July 1, 2022, the security business was transferred from the Systems Solutions operating segment to the Germany operating segment. Prior-year comparatives were adjusted retrospectively.

^b As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

Revenue, service revenue

In the first half of 2023, we generated revenue of EUR 12.3 billion, which was up by 2.4 % year-on-year. This was mainly attributable to growth in service revenues of 2.4 %, due to increased revenue in the fixed-network core business, largely broadband-driven, and to higher mobile service revenues. Another revenue driver was the partnership business. In organic terms, revenue increased by 1.7 % year-on-year and service revenue by 1.6 %.

Revenue from **Consumers** increased by 0.6 % compared with the prior year. Revenue from broadband business continued to grow, due in part to the positive effects from customer appreciation for reliable networks and high bandwidths. Fixed-network terminal equipment business also posted growth on the back of demand on the customer side for terminal equipment lease models. Volume-driven declines in revenue from voice components continued to impact on traditional fixed-network business. Mobile business declined on account of terminal equipment business.

Revenue from **Business Customers** was up by 2.6 % year-on-year. IT business and mobile business, the latter driven by sustained growth in the customer base, contributed to this uptrend. In organic terms, revenue increased by 1.0 % year-on-year.

Wholesale revenue was on a par with the prior-year level at the end of June 2023. The positive trend in the number of fiber-optic-based lines held steady year-on-year, and this was enough to offset the decrease in revenues from, among other things, declining volumes of unbundled local loop lines.

Adjusted EBITDA AL, EBITDA AL

Adjusted EBITDA AL increased by EUR 0.2 billion or 4.0 % year-on-year to EUR 5.0 billion. In organic terms, adjusted EBITDA AL grew by 3.0 % year-on-year. Our adjusted EBITDA AL margin increased to 40.8 %. The main reasons for this increase are a sound operational development, driven by high-value revenue growth, and enhanced cost efficiency. Organic factors also included the smaller headcount and ongoing implementation of efficiency enhancement and digitalization measures.

EBITDA AL decreased by EUR 1.5 billion to EUR 4.7 billion. In the prior-year quarter, special factors included the gain on deconsolidation of GlasfaserPlus (EUR 1.7 billion) and initial payments on account received from insurance companies in connection with damage sustained in the catastrophic flooding in July 2021 (EUR 0.1 billion). Expenses for socially responsible instruments in connection with staff restructuring were at the prior-year level.

Profit/loss from operations (EBIT)

Profit from operations amounted to EUR 2.9 billion, a decrease of 31.7 % year-on-year. This decline is primarily attributable to the gain recognized in the prior year on the deconsolidation of GlasfaserPlus. Depreciation, amortization and impairment losses were up against the prior-year level, mainly as a result of the sale and leaseback of passive network infrastructure in Germany in connection with the sale of GD Towers.

For further information on the sale of GD Towers, please refer to the section “Group organization, strategy, and management.”

Cash capex (before spectrum investment), cash capex

Cash capex increased by EUR 522 million or 29.4 % compared with the prior-year period, primarily due to different seasonal effects. Capital expenditure totaled around EUR 2.3 billion in the first half of 2023, in particular for the fiber-optic build-out. The number of households passed by our fiber-optic network had increased to around 6.2 million by the end of June 2023. In mobile communications, 95.3 % of German households can already use 5G.

United States

Customer development

thousands	June 30, 2023	Mar. 31, 2023	Change June 30, 2023/ Mar. 31, 2023 %	Dec. 31, 2022	Change June 30, 2023/ Dec. 31, 2022 %	June 30, 2022	Change June 30, 2023/ June 30, 2022 %
Customers	116,602	114,917	1.5	113,598	2.6	110,023	6.0
Postpaid customers	95,086	93,525	1.7	92,232	3.1	88,787	7.1
Postpaid phone customers ^a	74,132	73,372	1.0	72,834	1.8	71,053	4.3
Other postpaid customers ^a	20,954	20,153	4.0	19,398	8.0	17,734	18.2
Prepaid customers	21,516	21,392	0.6	21,366	0.7	21,236	1.3

^a The total base adjustment in the second quarter of 2022 was a reduction of 1.3 million total customers. Customers impacted by the decommissioning of the legacy Sprint CDMA and LTE and T-Mobile US UMTS networks have been excluded from our customer base resulting in the removal of 212 thousand postpaid phone customers and 349 thousand postpaid other customers in the first quarter of 2022 and 284 thousand postpaid phone customers, 946 thousand postpaid other customers and 28 thousand prepaid customers in the second quarter of 2022. In connection with our acquisition of companies, we included a base adjustment in the first quarter of 2022 to increase postpaid phone customers by 17 thousand and reduce postpaid other customers by 14 thousand. Certain customers now serviced through reseller contracts were removed from our reported postpaid customer base resulting in the removal of 42 thousand postpaid phone customers and 20 thousand postpaid other customers in the second quarter of 2022.

Customers

At June 30, 2023, the United States operating segment (T-Mobile US) had 116.6 million customers, compared to 113.6 million customers at December 31, 2022. Net customer additions were 3.0 million in the first half of 2023, compared to 3.2 million in the first half of 2022 due to the factors described below.

Postpaid net customer additions were 2.9 million in the first half of 2023, compared to 3.0 million in the first half of 2022. Postpaid net customer additions decreased primarily from lower postpaid other net customer additions, primarily due to lower net additions from mobile internet devices. This decrease was partially offset by higher High Speed Internet net customer additions, primarily due to continued growth in gross additions driven by increasing customer demand, partially offset by increased deactivations from a growing customer base. High Speed Internet net customer additions included in postpaid other net customer additions were 892 thousand and 826 thousand in the first half of 2023 and 2022, respectively.

Prepaid net customer additions were 150 thousand in the first half of 2023, compared to 208 thousand in the first half of 2022. This decrease was primarily due to continued moderation of industry growth and continued industry migration of prepaid to postpaid, partially offset by growth in High Speed Internet. High Speed Internet net customer additions included in prepaid net customer additions were 140 thousand and 72 thousand in the first half of 2023 and 2022, respectively.

Development of operations

millions of €								
	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Revenue^a	35,817	36,320	(1.4)	18,262	17,555	18,440	(4.8)	75,436
Service revenue^a	28,903	27,810	3.9	14,475	14,428	14,353	0.5	58,219
EBITDA	15,033	13,008	15.6	7,545	7,488	6,361	17.7	26,707
Special factors affecting EBITDA	(516)	(2,124)	75.7	(234)	(282)	(1,304)	78.4	(4,155)
EBITDA (adjusted for special factors)	15,549	15,132	2.8	7,779	7,770	7,665	1.4	30,862
EBITDA AL	12,368	9,055	36.6	6,173	6,195	4,141	49.6	19,665
Special factors affecting EBITDA AL	(722)	(3,454)	79.1	(363)	(359)	(2,196)	83.7	(5,949)
EBITDA AL (adjusted for special factors)	13,090	12,509	4.6	6,536	6,554	6,337	3.4	25,614
Core EBITDA AL (adjusted for special factors) ^b	12,895	11,717	10.1	6,401	6,494	5,976	8.7	24,280
EBITDA AL margin (adjusted for special factors) %	36.5	34.4		35.8	37.3	34.4		34.0
Depreciation, amortization and impairment losses	(7,770)	(10,046)	22.7	(3,970)	(3,800)	(5,443)	30.2	(19,237)
Profit (loss) from operations (EBIT)	7,262	2,962	n.a.	3,575	3,688	918	n.a.	7,470
EBIT margin %	20.3	8.2		19.6	21.0	5.0		9.9
Cash capex	(5,451)	(9,003)	39.5	(2,862)	(2,589)	(3,468)	25.3	(16,340)
Cash capex (before spectrum investment)	(5,360)	(6,393)	16.2	(2,799)	(2,561)	(3,368)	24.0	(13,361)

^a As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

^b Adjusted core EBITDA AL is distinguished by excluding revenue from terminal equipment leases from adjusted EBITDA AL, thereby presenting operational development undistorted by the withdrawal from the terminal equipment lease business.

Revenue, service revenue

Total revenue for the United States operating segment of EUR 35.8 billion in the first half of 2023 decreased by 1.4 %, compared to EUR 36.3 billion in the first half of 2022. In U.S. dollars, T-Mobile US' total revenues decreased 2.5 % during the same period. Total revenues decreased primarily due to lower equipment revenues partially offset by higher service revenues. The components of these changes are described below.

Service revenues increased in the first half of 2023 by 3.9 % to EUR 28.9 billion. This increase resulted from higher postpaid revenues, primarily due to higher average postpaid accounts and higher postpaid Average Revenue per Account (ARPA). This increase was partially offset by lower wholesale and other service revenues, primarily from lower MVNO revenues and lower Wireline revenues due to the sale of the wireline business on May 1, 2023, and lower prepaid revenues, primarily from lower prepaid Average Revenue per User (ARPU), partially offset by higher average prepaid customers.

Equipment revenues decreased in the first half of 2023 primarily from a decrease in the number of devices sold, primarily driven by higher postpaid upgrades in the prior-year period related to facilitating the migration of Sprint customers to the T-Mobile US network, as well as longer device lifecycles, and lower prepaid sales. In addition, equipment revenues decreased due to a decrease in lease revenues and customer purchases of leased devices primarily due to a lower number of customer devices under lease as a result of the continued strategic shift in device financing from leasing to equipment installment plans (EIP). The decrease in equipment revenues was partially offset by higher average revenue per device sold, primarily driven by higher promotions in the prior-year period, which included promotions for Sprint customers to facilitate their migration to the T-Mobile US network, partially offset by a decrease in the high-end phone mix.

Adjusted EBITDA AL, EBITDA AL

In euros, adjusted EBITDA AL increased by 4.6 % to EUR 13.1 billion in the first half of 2023, compared to EUR 12.5 billion in the first half of 2022. The adjusted EBITDA AL margin increased to 36.5 % in the first half of 2023, compared to 34.4 % in the first half of 2022. In U.S. dollars, adjusted EBITDA AL increased 3.5 % during the same period. Adjusted EBITDA AL increased primarily due to lower costs as a result of lower number of devices sold, primarily driven by longer device lifecycles and lower prepaid sales, lower average cost per device sold driven by a decrease in the high-end phone mix, higher service revenues as discussed above, higher realized Sprint Merger-related synergies, lower costs due to the sale of the wireline business on May 1, 2023, and lower bad debt expense. This increase was partially offset by lower equipment revenues as described above, higher site costs related to the continued build-out of our nationwide 5G network, higher commission amortization expense and higher advertising expense. In U.S. dollars, lease revenues decreased as a result of the continued strategic shift in device financing from leasing to EIP by 75.8 % in the first half of 2023.

In euros, adjusted core EBITDA AL increased by 10.1 % to EUR 12.9 billion in the first half of 2023, compared to EUR 11.7 billion in the first half of 2022. In U.S. dollars, adjusted core EBITDA AL increased by 8.9 % during the same period. The change was primarily due to the fluctuation in adjusted EBITDA AL, discussed above, excluding the change in lease revenues.

EBITDA AL in the first half of 2023 included special factors of EUR -0.7 billion compared to EUR -3.5 billion in the first half of 2022. The change in special factors was primarily due to lower Sprint Merger-related costs, lower legal-related expenses, including the settlement of certain litigation associated with the cyberattack on T-Mobile US in August 2021 of EUR 0.4 billion and lower impairment expense due to the non-cash impairment of certain Wireline Operating lease right-of-use assets recognized during the first half of 2022. Special factors include Sprint Merger-related costs predominantly associated with the integration of Sprint and are comprised of integration costs to achieve efficiencies in network, retail, information technology and back office operations, migrate customers to the T-Mobile US network and billing systems and the impact of legal matters assumed as part of the Sprint Merger. In addition, Sprint Merger-related special factors include restructuring costs, including severance, store rationalization and network decommissioning as well as transaction costs, including legal and professional services related to the completion of transactions. Overall, EBITDA AL increased by 36.6 % to EUR 12.4 billion in the first half of 2023, compared to EUR 9.1 billion in the first half of 2022, primarily due to the factors described above, including special factors.

Profit/loss from operations (EBIT)

EBIT increased to EUR 7.3 billion in the first half of 2023, compared to EUR 3.0 billion in the first half of 2022. In U.S. dollars, EBIT increased by USD 4.6 billion during the same period primarily due to higher EBITDA AL and lower depreciation, amortization and impairment losses. In U.S. dollars, depreciation, amortization and impairment losses decreased by 23.3 % primarily due to the non-cash impairment of certain Wireline Network assets recognized during the first half of 2022 and lower depreciation expense on leased devices, resulting from a lower number of total customer devices under lease and certain 4G-related network assets becoming fully depreciated, including assets impacted by the decommissioning of the legacy Sprint CDMA and LTE networks in 2022. These decreases were partially offset by higher depreciation expense (excluding leased devices) from the continued build-out of our nationwide 5G network.

Cash capex (before spectrum investment), cash capex

Cash capex (before spectrum investment) decreased by 16.2 % to EUR 5.4 billion in the first half of 2023, compared to EUR 6.4 billion in the first half of 2022. In U.S. dollars, cash capex (before spectrum investment) decreased by 16.9 % due to decrease in purchases of property and equipment primarily due to increased capital efficiencies from accelerated investments in the T-Mobile US nationwide 5G network in 2022.

Cash capex decreased by 39.5 % to EUR 5.5 billion in the first half of 2023, compared to EUR 9.0 billion in the first half of 2022. In U.S. dollars, cash capex decreased by 40.6 % primarily due to USD 2.8 billion paid for spectrum licenses won at the conclusion of Auction 110 in February 2022 compared to no spectrum licenses won during the first half of 2023 and lower purchases of property and equipment as discussed above.

Europe

Customer development

thousands

		June 30, 2023	Mar. 31, 2023	Change June 30, 2023/ Mar. 31, 2023 %	Dec. 31, 2022	Change June 30, 2023/ Dec. 31, 2022 %	June 30, 2022	Change June 30, 2023/ June 30, 2022 %
Europe, total	Mobile customers	47,582	47,357	0.5	47,336	0.5	46,459	2.4
	Contract customers	26,753	26,580	0.7	26,476	1.0	26,046	2.7
	Prepaid customers	20,829	20,777	0.3	20,860	(0.1)	20,413	2.0
	Fixed-network lines ^a	7,970	7,935	0.4	7,907	0.8	7,839	1.7
	Broadband customers	6,837	6,765	1.1	6,682	2.3	6,514	5.0
	Television (IPTV, satellite, cable)	4,194	4,160	0.8	4,131	1.5	4,067	3.1
	Unbundled local loop lines (ULL)/ Wholesale PSTN	1,690	1,728	(2.2)	1,768	(4.4)	1,849	(8.6)
	Wholesale broadband lines	1,078	1,044	3.3	1,011	6.6	937	15.0
Greece	Mobile customers	7,325	7,298	0.4	7,323	0.0	7,275	0.7
	Fixed-network lines ^a	2,623	2,624	0.0	2,622	0.0	2,621	0.1
	Broadband customers	2,387	2,375	0.5	2,359	1.2	2,329	2.5
Romania	Mobile customers	4,063	4,062	0.0	4,166	(2.5)	3,941	3.1
Hungary	Mobile customers	6,089	5,987	1.7	5,950	2.3	5,811	4.8
	Fixed-network lines	1,911	1,899	0.6	1,886	1.3	1,848	3.4
	Broadband customers	1,553	1,534	1.2	1,507	3.1	1,454	6.8
Poland	Mobile customers	12,460	12,553	(0.7)	12,512	(0.4)	12,107	2.9
	Fixed-network lines	29	30	(3.3)	30	(3.3)	29	0.0
	Broadband customers	205	182	12.6	154	33.1	107	91.6
Czech Republic	Mobile customers	6,464	6,440	0.4	6,423	0.6	6,373	1.4
	Fixed-network lines	741	721	2.8	704	5.3	673	10.1
	Broadband customers	447	440	1.6	430	4.0	411	8.8
Croatia	Mobile customers	2,323	2,293	1.3	2,305	0.8	2,318	0.2
	Fixed-network lines	869	867	0.2	868	0.1	872	(0.3)
	Broadband customers	654	649	0.8	648	0.9	642	1.9
Slovakia	Mobile customers	2,480	2,464	0.6	2,446	1.4	2,460	0.8
	Fixed-network lines	854	851	0.4	856	(0.2)	858	(0.5)
	Broadband customers	647	644	0.5	643	0.6	636	1.7
Austria	Mobile customers	4,645	4,566	1.7	4,510	3.0	4,557	1.9
	Fixed-network lines	608	607	0.2	605	0.5	601	1.2
	Broadband customers	664	665	(0.2)	663	0.2	661	0.5
Other^b	Mobile customers	1,733	1,693	2.4	1,702	1.8	1,617	7.2
	Fixed-network lines	336	336	0.0	336	0.0	337	(0.3)
	Broadband customers	280	277	1.1	277	1.1	273	2.6

^a In the second quarter of 2023, fixed-network lines in Greece were adjusted retrospectively for the first quarter of 2023 due to changes in definitions.

^b "Other": national companies of North Macedonia, Montenegro, and the lines of the GTS Central Europe group in Romania.

Total

In the Europe operating segment, almost all key performance indicators for customer development improved compared with the end of 2022. Our convergent product portfolio, in particular, generated growth compared with year-end 2022 of 4.6 % in FMC customers thanks to ongoing demand. As a consequence, we are working flat out to build out our fixed-network infrastructure with state-of-the-art optical fiber. The number of broadband customers has increased by 2.3 %. The number of mobile customers increased slightly compared with the end of 2022. Our build-out of the 5G network is making good progress.

Mobile communications

We had a total of 47.6 million mobile customers at the end of the first half of 2023, a slight increase of 0.5 % compared with the end of 2022. The number of contract customers increased by 1.0 %. The contract customer base grew in almost all of our national companies, but in particular in Greece, the Czech Republic, Poland, Croatia, Slovakia, and Austria. Overall, contract customers accounted for 56.2 % of the total customer base. Our customers benefited from greater coverage with fast mobile broadband – a result of our integrated network strategy. The footprint countries of our operating segment are also making excellent headway with 5G. As of June 30, 2023, our national companies covered 58.7 % of the population on average with 5G.

The prepaid customer base remained stable compared with the end of 2022. As part of our ordinary business activities, we offer our prepaid customers high-value contract plans with the resulting number of contract conversions also contributing positively to contract customer business.

Fixed network

The broadband business increased by 2.3 % compared with the end of 2022 to a total of 6.8 million customers. This growth is mainly driven by the national companies in Poland, Hungary, Greece, and the Czech Republic. By continuing to invest in optical fiber, we are systematically building out our fixed-network infrastructure. As of the end of the second quarter of 2023, around 8.5 million households have access to our high-performance fiber-optic network offering gigabit speeds. We have already won some 33 % of the households in these areas as active customers for one of our fiber-optic broadband products. The total number of fixed-network lines subscribed to increased again slightly by 0.8 %, reaching 8.0 million as of June 30, 2023.

The TV and entertainment business had a total of 4.2 million customers as of the end of the second quarter of 2023, up by 1.5 % compared with the end of the prior year. This was attributable among other things to the acquisition of exclusive rights to broadcast sports events in the prior year. With both telecommunications providers and OTT players offering TV services, the TV market is already saturated in many countries of our segment.

FMC – fixed-mobile convergence and digitalization

Our portfolio of convergent products, MagentaOne, was highly popular with consumers across all of our national companies. As of June 30, 2023, we had 7.3 million FMC customers; this corresponds to growth of 4.6 % compared with the end of the prior year. Our national companies in particular in Greece, the Czech Republic, Poland, and Hungary contributed to this growth. At the end of the first half of 2023, FMC customers accounted for 61.5 % of the broadband customer base. We have also seen rising customer numbers from the marketing of our MagentaOne Business product to business customers.

We continue to expand our digital interaction with customers, which means we can meet customer needs in a more personalized and efficient way, and position products and innovative services on the market more quickly. Around 66 % of our customers use our service app.

Development of operations

millions of €								
	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Revenue^a	5,683	5,411	5.0	2,784	2,899	2,729	6.2	11,158
Greece	1,523	1,512	0.7	736	787	768	2.5	3,155
Romania	138	157	(12.1)	69	69	78	(11.5)	306
Hungary	966	856	12.9	457	510	423	20.6	1,715
Poland	730	685	6.6	365	365	348	4.9	1,413
Czech Republic	650	591	10.0	321	329	300	9.7	1,226
Croatia	452	425	6.4	222	230	216	6.5	905
Slovakia	401	387	3.6	202	199	197	1.0	806
Austria	701	675	3.9	352	348	334	4.2	1,391
Other ^b	157	158	(0.6)	77	80	83	(3.6)	320
Service revenue^{a, c}	4,715	4,551	3.6	2,298	2,416	2,301	5.0	9,296
EBITDA	2,197	2,124	3.4	1,088	1,109	1,059	4.7	4,296
Special factors affecting EBITDA	(45)	(18)	n.a.	(5)	(39)	(16)	n.a.	(31)
EBITDA (adjusted for special factors)	2,242	2,142	4.7	1,094	1,148	1,075	6.8	4,327
EBITDA AL	1,962	1,944	0.9	978	985	969	1.7	3,933
Special factors affecting EBITDA AL	(45)	(18)	n.a.	(5)	(39)	(16)	n.a.	(31)
EBITDA AL (adjusted for special factors)	2,007	1,961	2.3	983	1,024	986	3.9	3,964
Greece	640	633	1.1	319	322	319	0.9	1,310
Romania	8	25	(68.0)	4	5	14	(64.3)	38
Hungary	275	243	13.2	110	164	116	41.4	493
Poland	196	198	(1.0)	93	103	100	3.0	378
Czech Republic	245	252	(2.8)	129	116	127	(8.7)	503
Croatia	163	160	1.9	80	83	81	2.5	349
Slovakia	170	174	(2.3)	84	86	89	(3.4)	350
Austria	263	252	4.4	133	130	128	1.6	506
Other ^b	46	24	91.7	31	15	12	25.0	37
EBITDA AL margin (adjusted for special factors) %	35.3	36.2		35.3	35.3	36.1		35.5
Depreciation, amortization and impairment losses	(1,251)	(1,235)	(1.3)	(610)	(641)	(617)	(3.9)	(2,572)
Profit (loss) from operations (EBIT)	946	889	6.4	478	468	443	5.6	1,724
EBIT margin %	16.6	16.4		17.2	16.1	16.2		15.5
Cash capex	(1,053)	(766)	(37.5)	(439)	(614)	(404)	(52.0)	(1,872)
Cash capex (before spectrum investment)	(889)	(760)	(17.0)	(436)	(453)	(402)	(12.7)	(1,755)

The contributions of the national companies correspond to their respective unconsolidated financial statements and do not take consolidation effects at operating segment level into account.

^a As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

^b "Other": national companies in North Macedonia, Montenegro, and the GTS Central Europe group in Romania, as well as the Europe Headquarters.

^c As of January 1, 2023, the definition of service revenue was extended. Prior-year comparatives were adjusted retrospectively.

Revenue, service revenue

Our Europe operating segment generated revenue of EUR 5.7 billion in the first half of 2023, a year-on-year increase of 5.0 %. Revenue also increased in organic terms by 5.0 %. Service revenues grew by 3.6 % year-on-year, or by 3.5 % in organic terms.

Organic revenue growth was largely driven by the strong performance of the mobile business, especially the increase in mobile service revenues with higher margins: alongside the larger contract customer base, higher prices in several countries and slight increases in roaming and visitor revenues further contributed to this trend. Contract customer additions also had positive effects on terminal equipment revenues. Fixed-network service revenues increased against the prior year. Our intense focus on the continued build-out of high-speed network infrastructure drove growth in broadband and TV revenues, which offset the expected declines in voice telephony revenues and wholesale revenues. The systems solutions business made a positive contribution to revenue overall. Regulatory interventions such as the reduction in termination rates had a negative impact on our organic development of revenue in the reporting period.

All countries apart from Romania contributed to the growth in revenue in organic terms, with our national companies in Hungary, Poland, the Czech Republic, Austria, Croatia, and Slovakia recording the best absolute development by country.

Revenue from **Consumers** increased in organic terms by 5.6 % year-on-year, due to the mobile business, where both service revenues and sales of mobile terminal equipment increased. In the fixed network, revenue from broadband and TV business increased thanks to our continuous fiber-optic build-out and our TV and entertainment offerings. This more than offset the decline in revenue from voice telephony. In addition, the higher number of FMC customers had a positive impact on revenue.

Revenue from **Business Customers** grew by 6.3 % against the first half of the prior year, with Hungary, Poland, and Greece making significant contributions in core business. Growth was reported across all product areas. The number of mobile contract customers increased by 2.3 %, with almost all national companies contributing to growth, in particular Poland, followed by Austria and Greece, which offset the census-driven decline in Hungary. In the fixed-network business, the number of broadband customers rose by 5.1 %. Growth was recorded in particular in the segment of smaller business customers. ICT revenue grew strongly compared with the first half of the prior year due to an increase in systems solutions business and data communication, especially in Hungary and Greece. Digital Infrastructure developed positively as a result of the expansion of capacities and strong growth in the security solutions business.

Adjusted EBITDA AL, EBITDA AL

Our Europe operating segment generated adjusted EBITDA AL of EUR 2.0 billion in the first half of 2023, up by 2.3 % against the prior-year level. In organic terms, adjusted EBITDA AL grew by 1.9 %, again making a positive contribution to earnings, with a positive net margin more than sufficient to offset the rise in indirect costs. This rise in costs is mainly driven by inflation-induced cost increases (especially energy and personnel costs). In Hungary, the supplementary telecommunications tax continues to have an adverse impact on our EBITDA AL.

Looking at the development by country, the increase in adjusted organic EBITDA AL was attributable to positive absolute trends, in particular at our national companies in Hungary, Greece, and Austria.

At EUR 2.0 billion, EBITDA AL was slightly up against the prior-year level. The expense arising from special factors was higher than in the prior year.

Development of operations in selected countries

Greece. Revenues in Greece amounted to EUR 1.5 billion in the first half of 2023, a slight year-on-year increase of 0.7 %. This trend is due to higher mobile revenues. Alongside higher service revenues, the addition of new contract customers drove an increase in terminal equipment revenues. However, mobile revenues were affected by termination rate cuts imposed by the regulatory authority. Revenue declined in the fixed-network business, where traditional voice telephony revenues are tapering off. Wholesale revenues also decreased as a result of lower volumes of international traffic. Our convergence products, however, performed well, with further customer additions and corresponding revenue. Systems solutions business recorded a further substantial rise in revenue.

Adjusted EBITDA AL stood at EUR 640 million, up 1.1 % year-on-year, driven by lower indirect costs.

Hungary. Revenues in Hungary totaled EUR 966 million in the first six months of 2023, which corresponds to substantial growth of 12.9 % despite unfavorable exchange rate effects. In organic terms, revenue was up against the prior-year period by 14.6 %. The biggest driver of this increase was mobile business, mainly on account of significantly higher service revenues. Fixed-network revenue also increased markedly against the first half of the prior year. We recorded higher service revenues in the broadband and TV business, both driven again by larger customer bases. Thanks to our increased investments in the build-out of fiber-optic lines, our offers have won over large numbers of customers. Our convergence products also continued to perform well, with further customer additions and corresponding revenue. Systems solutions business also recorded a significant increase in revenue.

Adjusted EBITDA AL stood at EUR 275 million, up 13.2 % year-on-year. In organic terms, the increase was 15.4 %. The increase in indirect costs, especially for energy and personnel, was more than offset by the higher net margin.

Poland. Revenue in Poland grew by 6.6 % in the first half of 2023 to EUR 730 million. In organic terms, revenue increased by 6.3 %. Mobile business was the main driver of this uptrend in revenue, with growth in the contract customer base also having a positive effect on terminal equipment business. However, mobile revenues were affected by termination rate cuts imposed by the regulatory authority. The number of FTTH customers in the fixed-network business also increased significantly, creating the basis for further broadband growth. This is reflected in higher broadband service revenues, and is also thanks to our successful partnership agreements on network infrastructure. The number of FMC customers increased again substantially in the first half of 2023. This had a corresponding positive impact on revenues. Revenue in systems solutions business remained stable.

Adjusted EBITDA AL stood at EUR 196 million, down slightly by 1.0 % against the prior-year period level. In organic terms, the decline was 1.2 %. The revenue-driven increase in the net margin was entirely offset by the increase in indirect costs, in particular as a result of higher energy and personnel costs.

Czech Republic. Revenue in the Czech Republic stood at EUR 650 million in the first half of 2023, an increase of 10.0 % against the prior-year period. Excluding positive exchange rate effects, organic growth was 5.7 %. This is largely attributable to our mobile business, which recorded higher service revenues and increased revenues from terminal equipment sales, the latter driven in part by renewed growth in the number of contract customers. However, mobile revenues were affected by termination rate cuts imposed by the regulatory authority. The fixed-network business also contributed to revenue growth. Thanks to our investments in the build-out of fiber-optic lines, our offers have won over large numbers of customers. Our convergence products recorded further customer additions and corresponding revenue growth.

Adjusted EBITDA AL decreased slightly by 2.8 % year-on-year to EUR 245 million. In organic terms, earnings fell by 6.2 %. The stable net margin was offset by higher indirect costs, in particular as a result of higher energy and personnel costs.

Austria. In the first six months of 2023, we recorded revenue of EUR 701 million in Austria. This increase of 3.9 % was mainly attributable to growth in mobile revenues, despite the adverse effects from the termination rate cuts. Alongside higher service revenues, terminal equipment revenues also increased, driven in part by growth in the contract customer base. Fixed-network revenues increased slightly due to higher broadband revenues. Revenue from systems solutions business remained stable.

Adjusted EBITDA AL increased by 4.4 % year-on-year to EUR 263 million. In organic terms, earnings grew by 3.3 %, driven mainly by a revenue-related increase in the net margin.

Profit/loss from operations (EBIT)

In our Europe operating segment, EBIT increased by 6.4 % in the first half of the year to EUR 946 million, mainly due to the 3.4 % increase in EBITDA. Depreciation, amortization and impairment losses were up 1.3 % against the prior-year period.

Cash capex (before spectrum investment), cash capex

In the first six months of 2023, our Europe operating segment reported cash capex (before spectrum investment) of EUR 889 million, up 17.0 % year-on-year, largely due to the timing of the allocation of capital expenditure. Cash capex increased by 37.5 % against the first half of the prior year as a result of the acquisition of spectrum licenses in Croatia and the Czech Republic. We continue to invest in the provision of broadband, fiber-optic technology, and 5G as part of our integrated network strategy.

Systems Solutions

Order entry

millions of €					
	H1 2023	Q1 2023	FY 2022	H1 2022	Change H1 2023/ H1 2022 %
Order entry ^a	1,500	754	3,952	1,902	(21.1)

^a As of July 1, 2022, the security business was transferred from the Systems Solutions operating segment to the Germany operating segment. Prior-year comparatives were adjusted retrospectively.

Development of business

The first half of 2023 continued to be dominated by the focusing of our systems solutions business on growth and future viability and the continuation of our transformation program. As communicated at the Capital Markets Day in May 2021, we have established four portfolio areas in line with market needs: Advisory, Cloud, Digital, and Security.

We have also defined selected industries (automotive, healthcare, public sector, and public transport), for which we have increased our offer of vertical solutions based on our expertise. In addition, we have agreed partnerships with leading cloud service providers (e.g., Amazon, Google, and Microsoft), so as to be able to offer our customers an even broader and more flexible range of cloud solutions. We are also increasingly expanding our portfolio with AI (artificial intelligence)-based solutions and data room offerings.

By aligning ourselves in this way, our strategic goal is to become the leading IT service provider in the DACH region (Germany, Austria, Switzerland) and in other selected countries.

Order entry in our Systems Solutions operating segment was down by 21.1% year-on-year in the first half of 2023. This development is largely attributable to the high-volume deals concluded in the prior year, the like of which are not expected in this reporting year until the second half of the year. Furthermore, the prior-year figure includes order entry for Multimedia Solutions (MMS), which was reassigned to the Germany segment as of January 1, 2023.

Development of operations^a

millions of €								
	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Revenue^b	1,905	1,869	1.9	946	959	942	1.8	3,811
Of which: external revenue	1,588	1,527	4.0	792	796	764	4.2	3,106
Service revenue^{b, c}	1,855	1,844	0.6	921	934	930	0.4	3,751
EBITDA	155	133	16.5	72	82	67	22.4	229
Special factors affecting EBITDA	(51)	(66)	22.7	(26)	(25)	(37)	32.4	(159)
EBITDA (adjusted for special factors)	205	199	3.0	99	107	105	1.9	388
EBITDA AL	108	80	35.0	49	59	42	40.5	125
Special factors affecting EBITDA AL	(51)	(66)	22.7	(26)	(25)	(37)	32.4	(159)
EBITDA AL (adjusted for special factors)	159	147	8.2	75	84	79	6.3	284
EBITDA AL margin (adjusted for special factors) %	8.3	7.9		7.9	8.8	8.4		7.5
Depreciation, amortization and impairment losses	(118)	(131)	9.9	(61)	(57)	(61)	6.6	(340)
Profit (loss) from operations (EBIT)	36	2	n.a.	11	25	7	n.a.	(110)
Special factors affecting EBIT	(61)	(85)	28.2	(35)	(27)	(42)	35.7	(270)
EBIT (adjusted for special factors)	98	87	12.6	46	52	48	8.3	160
EBIT margin (adjusted for special factors) %	5.1	4.7		4.9	5.4	5.1		4.2
Cash capex	(120)	(96)	(25.0)	(60)	(59)	(53)	(11.3)	(221)
Cash capex (before spectrum investment)	(120)	(96)	(25.0)	(60)	(59)	(53)	(11.3)	(221)

^a As of July 1, 2022, the security business was transferred from the Systems Solutions operating segment to the Germany operating segment. Prior-year comparatives were adjusted retrospectively.

^b As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

^c As of January 1, 2023, the definition of service revenue was extended. Prior-year comparatives were adjusted retrospectively.

Revenue, service revenue

Revenue in our Systems Solutions operating segment developed more strongly than expected, increasing by 1.9% year-on-year in the first half of 2023 to EUR 1.9 billion. This positive revenue trend is driven by growth in the Digital (up 10.1%), Road Charging (up 41.1%) and Advisory (up 9.8%) portfolio areas, and by a stable performance in the Cloud portfolio area, which includes our declining traditional IT infrastructure business. External revenue increased by 4.0%, mainly driven by the Digital and Road Charging portfolio areas. Service revenue also developed positively, increasing by 0.6%. In organic terms, revenue increased by 4.6% year-on-year and service revenue by 3.3%.

Adjusted EBITDA AL, EBITDA AL

In the first half of 2023, adjusted EBITDA AL at our Systems Solutions operating segment increased by 8.2% year-on-year to EUR 159 million, which was in line with our expectations. Efficiency effects from our transformation program and effects from increased revenue in the Digital and Road Charging portfolio areas exceeded the decline in earnings in the Cloud portfolio area, which includes our traditional IT infrastructure business. In organic terms, adjusted EBITDA AL grew by 3.2% year-on-year. EBITDA AL increased by EUR 28 million compared with the prior year to EUR 108 million. The expense arising from special factors decreased by EUR 15 million year-on-year, to EUR 51 million, as a result of lower restructuring costs.

Profit/loss from operations (EBIT), adjusted EBIT

Adjusted EBIT in our Systems Solutions operating segment grew by EUR 11 million year-on-year in the first half of 2023, coming in at EUR 98 million, due to the reasons described under adjusted EBITDA AL. EBIT increased by EUR 34 million year-on-year to EUR 36 million. The expense arising from special factors decreased by EUR 24 million year-on-year, to EUR 61 million, as a result of lower restructuring costs and lower impairment losses.

Cash capex (before spectrum investment), cash capex

Cash capex in the Systems Solutions operating segment stood at EUR 120 million in the first half of 2023, up EUR 24 million year-on-year, primarily due to increased demand for on-board units in the Road Charging portfolio area and higher investments in the Digital portfolio area.

Group Development

The sale of the GD Towers business entity was consummated on February 1, 2023, and GD Towers has not been part of the Group since that date. The development of operations contains the contributions for the first month of 2023.

The GD Towers business entity had been recognized in the interim consolidated financial statements as a discontinued operation from the third quarter of 2022 until its sale. According to the management approach, we include the contributions by GD Towers, for the period mentioned, in the management-relevant financial performance indicators explained here.

For further information on the sale and the presentation of GD Towers according to the management approach, please refer to the section [“Group organization, strategy, and management.”](#)

The sale of T-Mobile Netherlands was consummated on March 31, 2022. T-Mobile Netherlands has not been part of the Group since April 1, 2022. The development of operations contains the contributions for the first quarter of 2022.

Development of operations

millions of €								
	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Revenue	106	1,115	(90.5)	102	4	291	(98.6)	1,708
Of which: T-Mobile Netherlands	0	536	(100.0)	0	0	0	n.a.	536
Of which: GD Towers	99	570	(82.6)	99	0	285	(100.0)	1,154
Service revenue	0	411	(100.0)	0	0	0	n.a.	411
EBITDA	13,012	1,550	n.a.	13,011	1	259	(99.6)	2,106
Special factors affecting EBITDA	12,947	906	n.a.	12,941	6	38	(84.2)	992
EBITDA (adjusted for special factors)	65	644	(89.9)	70	(5)	222	n.a.	1,113
Of which: T-Mobile Netherlands	0	201	(100.0)	0	0	0	n.a.	201
Of which: GD Towers	78	461	(83.1)	78	0	232	(100.0)	943
EBITDA AL	13,007	1,425	n.a.	13,006	1	201	(99.5)	1,956
Special factors affecting EBITDA AL	12,947	906	n.a.	12,941	6	38	(84.2)	992
EBITDA AL (adjusted for special factors)	60	519	(88.4)	65	(5)	164	n.a.	964
Of which: T-Mobile Netherlands	0	190	(100.0)	0	0	0	n.a.	190
Of which: GD Towers	73	347	(79.0)	73	0	174	(100.0)	804
EBITDA AL margin (adjusted for special factors) %	56.6	46.5		63.7	(125.0)	56.4		56.4
Depreciation, amortization and impairment losses	(1)	(193)	99.5	(1)	0	(97)	100.0	(195)
Profit (loss) from operations (EBIT)	13,011	1,357	n.a.	13,010	1	162	(99.4)	1,911
Cash capex	(19)	(158)	88.0	(18)	(1)	(59)	98.3	(343)
Cash capex (before spectrum investment)	(19)	(158)	88.0	(18)	(1)	(59)	98.3	(343)

Revenue, service revenue

Revenue in our Group Development operating segment decreased in the first half of 2023 by 90.5 % year-on-year to EUR 106 million. This decline was mainly attributable to the sale of T-Mobile Netherlands and GD Towers. In organic terms, revenue grew by 3.1 % year-on-year, mainly due to operationally and structurally driven growth in our GD Towers business entity in January 2023. The GD Towers business did not generate any service revenues.

Adjusted EBITDA AL, EBITDA AL

Adjusted EBITDA AL decreased by 88.4 % to EUR 60 million. Here too, the decline was attributable to the sale of T-Mobile Netherlands and GD Towers. In organic terms, adjusted EBITDA AL grew by 47.1 %. The suspension of the depreciation on right-of-use assets due to the fact that the GD Towers business entity had been held for sale starting the third quarter of 2022 had a positive effect. EBITDA AL was positively influenced by net special factors of EUR 12.9 billion, mainly due to the deconsolidation of GD Towers. EBITDA AL increased by EUR 11.6 billion compared with the prior-year period to EUR 13.0 billion.

Profit/loss from operations (EBIT)

EBIT increased by EUR 11.7 billion year-on-year to EUR 13.0 billion, mainly as a result of the development described under EBITDA AL. Depreciation, amortization and impairment losses were down year-on-year, primarily in connection with the fact that the GD Towers business entity had been held for sale starting the third quarter of 2022, and, accordingly, the related depreciation and amortization had been suspended, and its subsequent sale.

Cash capex (before spectrum investment), cash capex

Cash capex stood at EUR 19 million, well below the prior-year level. The decline is mainly attributable to the sale of T-Mobile Netherlands and GD Towers.

Group Headquarters & Group Services

Development of operations

millions of €

	H1 2023	H1 2022	Change %	Q1 2023	Q2 2023	Q2 2022	Change %	FY 2022
Revenue	1,130	1,220	(7.4)	578	552	616	(10.4)	2,407
Service revenue^a	482	514	(6.2)	242	240	257	(6.6)	1,026
EBITDA	(253)	(28)	n.a.	(146)	(107)	(37)	n.a.	(361)
Special factors affecting EBITDA	(80)	2	n.a.	(42)	(38)	(14)	n.a.	(234)
EBITDA (adjusted for special factors)	(173)	(30)	n.a.	(104)	(69)	(23)	n.a.	(128)
EBITDA AL	(397)	(184)	n.a.	(218)	(179)	(112)	(59.8)	(672)
Special factors affecting EBITDA AL	(80)	1	n.a.	(42)	(38)	(12)	n.a.	(234)
EBITDA AL (adjusted for special factors)	(317)	(185)	(71.4)	(176)	(141)	(100)	(41.0)	(437)
Depreciation, amortization and impairment losses	(670)	(738)	9.2	(354)	(317)	(359)	11.7	(1,476)
Profit (loss) from operations (EBIT)	(923)	(766)	(20.5)	(499)	(424)	(397)	(6.8)	(1,837)
Cash capex	(493)	(473)	(4.2)	(259)	(234)	(238)	1.7	(973)
Cash capex (before spectrum investment)	(493)	(473)	(4.2)	(259)	(234)	(238)	1.7	(973)

^a As of January 1, 2023, the definition of service revenue was extended. Prior-year comparatives were adjusted retrospectively.

Revenue, service revenue

Revenue in our Group Headquarters & Group Services segment in the first half of 2023 decreased by 7.4 % year-on-year, mainly as a result of lower intragroup revenues from land and buildings due to the ongoing optimized use of space as well as to lower intragroup service revenues at Deutsche Telekom IT on account of a reduced revenue-relevant cost basis. By contrast, the reassignment of units in connection with the bundling of finance functions that were still assigned to the Germany operating segment in the first quarter of 2022 had an increasing effect on revenue. Against this background, organic revenue decreased by 5.7 % compared with the prior-year period.

Adjusted EBITDA AL, EBITDA AL

Adjusted EBITDA AL in the Group Headquarters & Group Services segment declined by EUR 132 million in the reporting period to EUR -317 million, primarily due to higher intragroup reimbursements and lower revenue from land and buildings, as well as expected seasonal fluctuations. Overall, EBITDA AL was negatively impacted in the reporting period by special factors amounting to EUR 80 million, especially for staff-related measures. In the prior-year period, EBITDA AL had benefited from positive net special factors of EUR 1 million, with the positive effect from the reduction of other provisions, including in connection with the termination of legal proceedings, offsetting expenses for staff-related measures.

Profit/loss from operations (EBIT)

The year-on-year decrease of EUR 157 million in EBIT to EUR -923 million was mainly due to the decline in EBITDA AL. Depreciation, amortization and impairment losses were down by contrast, largely due to lower capitalization in connection with declines both in the licensing of the Group-wide ERP system and in land and buildings due to the ongoing optimization of our real estate portfolio.

Cash capex (before spectrum investment), cash capex

Cash capex increased by EUR 20 million year-on-year, primarily owing to higher capital expenditure in the Technology and Innovation Board of Management department.

Events after the reporting period

Please refer to the section “[Events after the reporting period](#)” in the interim consolidated financial statements.

Forecast

The statements in this section reflect the current views of our management. Contrary to the forecasts published in the 2022 combined management report ([2022 Annual Report](#)) and the Interim Group Report as of March 31, 2023, we now expect to post higher adjusted EBITDA AL. Adjusted EBITDA AL for full-year 2023 was originally expected to come in at around EUR 40.9 billion. We now expect adjusted EBITDA AL for the Group to come in at around EUR 41.0 billion in the 2023 financial year. This is largely attributable on the one hand to stronger-than-expected business performance outside of the United States. Here we now expect to post adjusted EBITDA AL of around EUR 14.0 billion, up from the previous guidance of EUR 13.9 billion. We are also raising our guidance for the United States operating segment by USD 50 million, still anticipating adjusted EBITDA AL of around USD 28.5 billion.

All other statements made remain valid. Our planning assumes an unchanged U.S. dollar exchange rate of USD 1.05; financial results for GD Towers were not included.

For more information on the business risks, please refer to the section “[Risks and opportunities](#).” For additional information and recent changes in the economic situation, please refer to the section “[The economic environment](#).” Readers are also referred to the “[Disclaimer](#)” at the end of this report.

Risks and opportunities

This section provides important additional information and explains recent changes in the risks and opportunities compared to those described in the 2022 combined management report ([2022 Annual Report](#)). Readers are also referred to the “[Disclaimer](#)” at the end of this report.

Corporate risks

Strategic implementation and integration. Collaboration with Chinese suppliers is being impeded by the enduring trade conflict between the United States and China. Since 1997, the United States has restricted the use of U.S. technology for various countries, as well as, since 2020, for some Chinese companies, on account of security concerns. The United States also puts pressure on other countries to do the same. In Germany, the legislator adopted the Second Act to Increase the Security of Information Technology Systems, or the IT Security Act 2.0 (IT-Sicherheitsgesetz 2.0), in 2021. The Act does not include any ban on individual manufacturers. All 5G operators must notify the authorities of new critical components and the suppliers thereof in accordance with the catalog of security requirements pursuant to the Telecommunications Act and prior to first-time operation. If the Federal Government has security concerns, it can introduce a blanket ban on using certain manufacturers. Deutsche Telekom itself has long been scrutinizing security-critical components prior to installation and on an ongoing basis once in operation. In March 2023, under the IT Security Act 2.0, the Federal Ministry of the Interior and Community (BMI) asked German network operators to identify all 5G components from the Chinese suppliers Huawei and ZTE that have already been installed and map critical functions, and to notify the authority accordingly. Although BMI speaks of an impartial review, there is public speculation over the possibility that, in the second half of 2023, the findings could lead to a ban on deploying Chinese equipment in further parts of the German network classed as potentially critical, within certain time frames. The replacement of these components could incur high costs. In other countries, such as Austria, the Czech Republic, and Poland, it is still possible that critical infrastructure suppliers will have to be replaced within specific deadlines. Compared to the end of 2022, we already raised the risk significance of the risk category “Strategic implementation and integration” from high to very high in the first quarter of 2023, due to the extensive costs that could be incurred should there be a retrospective order to remove components.

Procurement and suppliers. Deutsche Telekom’s supply chains could currently be negatively impacted by a number of factors, such as geopolitical tensions, e.g., the United States’ technology sanctions against China, as well as cyberattacks and supply chain restructuring. Furthermore, the general costs of semiconductor materials, production, energy, wages, and global logistics are rising, leading to general price increases for products and services. Europe and the United States are experiencing delays in deliveries of individual products from certain vendors. However, thanks to countermeasures taken, shortages were avoided and continue to recede. At T-Mobile US, the increased concentration on the terminal equipment of a single vendor and the commensurate growing dependency could expose us to further risks. Continued geopolitical effects and price increases are expected. We address these challenges with a range of organizational, contractual, and strategic procurement measures, including the Supply Chain Resilience task force. To reflect the growing dependencies in T-Mobile US’ terminal equipment portfolio, we are raising the risk significance of the risk category “Procurement and suppliers” from low to medium.

Data privacy and data security. All Group companies are subject to specific data privacy regulations (in the EU especially the General Data Protection Regulation (GDPR)). These requirements must be implemented and their compliance must be monitored. Data privacy incidents can be sanctioned with extremely high fines (up to between 2 and 4 % of the global Group revenue). The European supervisory authorities' concept for fines has been applied. It stipulates high fines even for violations with a low criticality. The supervisory authorities' practice with respect to fines demonstrates that more and higher fines are being imposed. Despite mitigation measures and well-established data privacy management structures, it is not possible to fundamentally rule out data privacy incidents as almost all procedures/processes in the Group are relevant in terms of data protection. Errors may occur that are linked to reputation, cost, and sanction risks. Cybercrime and industrial espionage are on the rise and they are becoming ever more complex due to rapidly advancing technologies and attack methods. As a result, we face constant challenges and adjustments to protect our customer and business partner data, as well as our networks, technologies, products, and services against these attacks. Such incidents can lead, among other things, to business disruptions, embezzlement, or unauthorized access to confidential or personal information, and to loss of reputation. Due to the rise in successful cyberattacks against Deutsche Telekom in recent years, predominantly in the United States, and the growing overall threat level imposed by cyberattacks, as well as the supervisory authorities' tougher practice with respect to data privacy-related fines, the risk significance of the risk category "Data privacy and data security" is rising from high to very high.

Financial risks. The war in Ukraine and the current situation on the world market drove sharp rises in energy costs in 2022. Energy prices could remain volatile, although the price level on the world market fell slightly in the first half of 2023. Inflationary pressure in Germany and the United States resulted in further interest rate hikes in the first half of 2023, prompting a reduction in the variable-interest debt portfolio to temper interest rate sensitivity. By taking account of fluctuating energy prices and the changes to the debt portfolio during the planning process, we were able to lower the risk significance of the risk category "Financial risks" from high to medium.

Litigation

Proceedings against T-Mobile US in consequence of the cyberattack on T-Mobile US in August 2021. In the proceedings against T-Mobile US in relation to the cyberattack on T-Mobile US in August 2021, the competent court issued an order on June 29, 2023 granting final approval of the agreement dated July 22, 2022 to settle the federal class action lawsuit. The order has been appealed, leading to a delay in the conclusion of the proceedings.

Assessment of the aggregate risk position

The aggregate risk position has deteriorated compared with the risks and opportunities as described in the 2022 combined management report ([2022 Annual Report](#)) due to a potential expansion of the ban on Chinese network components, the enduring pressures on global economic development, and the tense geopolitical situation. At the time of preparing this report, neither our risk management system nor our management could identify any material risks to the continued existence of Deutsche Telekom AG or a significant Group company as a going concern.

Interim consolidated financial statements

Consolidated statement of financial position

millions of €	June 30, 2023	Dec. 31, 2022	Change	Change %	June 30, 2022
Assets					
Current assets	37,233	39,144	(1,911)	(4.9)	33,630
Cash and cash equivalents	8,742	5,767	2,975	51.6	5,281
Trade receivables	15,750	16,766	(1,016)	(6.1)	16,853
Contract assets	2,500	2,410	90	3.7	2,093
Current recoverable income taxes	204	213	(9)	(4.2)	195
Other financial assets	5,324	4,865	459	9.4	4,179
Inventories	2,248	2,639	(391)	(14.8)	2,992
Other assets	2,342	1,800	542	30.1	1,939
Non-current assets and disposal groups held for sale	122	4,683	(4,561)	(97.4)	99
Non-current assets	262,468	259,446	3,022	1.2	268,056
Intangible assets	138,026	140,600	(2,574)	(1.8)	144,544
Property, plant and equipment	65,840	65,729	111	0.2	65,185
Right-of-use assets	34,312	33,727	585	1.7	38,061
Capitalized contract costs	3,352	3,205	147	4.6	2,950
Investments accounted for using the equity method	7,349	1,318	6,031	n.a.	1,995
Other financial assets	4,881	5,044	(163)	(3.2)	5,215
Deferred tax assets	7,251	8,316	(1,065)	(12.8)	8,604
Other assets	1,456	1,507	(51)	(3.4)	1,502
Total assets	299,701	298,590	1,111	0.4	301,686
Liabilities and shareholders' equity					
Current liabilities	39,617	45,389	(5,772)	(12.7)	39,647
Financial liabilities	13,547	14,389	(842)	(5.9)	12,199
Lease liabilities	5,394	5,126	268	5.2	5,342
Trade and other payables	10,384	12,035	(1,651)	(13.7)	11,179
Income tax liabilities	943	801	142	17.7	811
Other provisions	3,394	4,412	(1,018)	(23.1)	4,009
Other liabilities	3,922	3,412	510	14.9	4,250
Contract liabilities	2,034	1,868	166	8.9	1,857
Liabilities directly associated with non-current assets and disposal groups held for sale	0	3,347	(3,347)	(100.0)	0
Non-current liabilities	165,685	165,881	(196)	(0.1)	173,547
Financial liabilities	96,434	98,641	(2,207)	(2.2)	102,307
Lease liabilities	36,605	33,666	2,939	8.7	37,183
Provisions for pensions and other employee benefits	3,870	4,150	(280)	(6.7)	3,913
Other provisions	3,765	3,792	(27)	(0.7)	4,369
Deferred tax liabilities	22,159	22,800	(641)	(2.8)	22,925
Other liabilities	2,024	2,171	(147)	(6.8)	2,114
Contract liabilities	829	663	166	25.0	736
Liabilities	205,302	211,270	(5,968)	(2.8)	213,194
Shareholders' equity	94,399	87,320	7,079	8.1	88,492
Issued capital	12,765	12,765	0	0.0	12,765
Treasury shares	(28)	(35)	7	20.0	(36)
	12,737	12,730	7	0.1	12,729
Capital reserves	59,299	61,532	(2,233)	(3.6)	62,266
Retained earnings including carryforwards	(29,767)	(34,489)	4,722	13.7	(33,938)
Total other comprehensive income	474	783	(309)	(39.5)	1,528
Net profit (loss)	16,899	8,001	8,898	n.a.	5,409
Issued capital and reserves attributable to owners of the parent	59,642	48,558	11,084	22.8	47,993
Non-controlling interests	34,757	38,762	(4,005)	(10.3)	40,499
Total liabilities and shareholders' equity	299,701	298,590	1,111	0.4	301,686

Consolidated income statement

millions of €

	H1 2023	H1 2022	Change %	Q2 2023	Q2 2022	Change %	FY 2022
Net revenue	55,045	55,528	(0.9)	27,221	27,835	(2.2)	114,197
Of which: interest income calculated using the effective interest method	334	266	25.6	161	138	16.7	589
Other operating income	628	3,455	(81.8)	294	289	1.7	4,653
Changes in inventories	22	29	(24.1)	2	9	(77.8)	26
Own capitalized costs	1,346	1,395	(3.5)	679	714	(4.9)	2,852
Goods and services purchased	(22,846)	(25,434)	10.2	(11,118)	(12,579)	11.6	(52,926)
Personnel costs	(9,586)	(9,684)	1.0	(4,716)	(4,909)	3.9	(19,371)
Other operating expenses	(2,488)	(2,729)	8.8	(1,285)	(1,664)	22.8	(6,383)
Impairment losses on financial assets	(524)	(602)	13.0	(254)	(361)	29.6	(1,235)
Gains (losses) from the write-off of financial assets measured at amortized cost	(4)	(18)	77.8	(4)	(5)	20.0	(24)
Other	(1,959)	(2,110)	7.2	(1,028)	(1,299)	20.9	(5,124)
EBITDA	22,121	22,559	(1.9)	11,077	9,695	14.3	43,049
Depreciation, amortization and impairment losses	(11,900)	(14,144)	15.9	(5,869)	(7,475)	21.5	(27,635)
Profit (loss) from operations (EBIT)	10,221	8,415	21.5	5,207	2,221	n.a.	15,414
Finance costs	(2,869)	(2,527)	(13.5)	(1,491)	(1,291)	(15.5)	(5,292)
Interest income	385	228	68.9	60	113	(46.9)	387
Interest expense	(3,254)	(2,755)	(18.1)	(1,550)	(1,404)	(10.4)	(5,679)
Share of profit (loss) of associates and joint ventures accounted for using the equity method	(10)	1	n.a.	11	(18)	n.a.	(524)
Other financial income (expense)	(59)	988	n.a.	(143)	667	n.a.	1,379
Profit (loss) from financial activities	(2,938)	(1,539)	(90.9)	(1,623)	(641)	n.a.	(4,437)
Profit (loss) before income taxes	7,283	6,876	5.9	3,584	1,580	n.a.	10,977
Income taxes	(1,940)	(1,321)	(46.9)	(961)	(283)	n.a.	(1,937)
Profit (loss) after taxes from continuing operations	5,343	5,556	(3.8)	2,623	1,297	n.a.	9,039
Profit (loss) after taxes from discontinued operation	13,691	193	n.a.	0	97	(100.0)	443
Profit (loss)	19,034	5,749	n.a.	2,623	1,394	88.2	9,482
Profit (loss) attributable to							
Owners of the parent (net profit (loss))	16,899	5,409	n.a.	1,539	1,460	5.4	8,001
Non-controlling interests	2,135	340	n.a.	1,084	(66)	n.a.	1,481

In light of the IFRS Interpretations Committee's agenda decision published in May 2022 on transactions involving the commercial resale of software, Deutsche Telekom has implemented changes to its accounting practices with respect to the recognition of gross vs. net revenues, effective the start of the third quarter of 2022. Prior-year comparatives were adjusted retrospectively.

As a result of the agreement concluded on July 13, 2022, from the third quarter of 2022, the GD tower companies are recognized in the interim consolidated financial statements as discontinued operation. Prior-year comparatives were adjusted retrospectively.

Earnings per share

		H1 2023	H1 2022	Change %	Q2 2023	Q2 2022	Change %	FY 2022
Profit (loss) from continuing operations attributable to the owners of the parent (net profit (loss))	millions of €	3,208	5,216	(38.5)	1,539	1,363	12.9	7,558
Profit (loss) from discontinued operation attributable to the owners of the parent (net profit (loss))	millions of €	13,691	193	n.a.	0	97	(100.0)	443
Profit (loss) attributable to the owners of the parent (net profit (loss))	millions of €	16,899	5,409	n.a.	1,539	1,460	5.4	8,001
Adjusted weighted average number of ordinary shares outstanding (basic and diluted)	millions	4,975	4,972	0.1	4,975	4,972	0.1	4,972
Earnings per share from continuing operations (basic and diluted)	€	0.64	1.05	(39.0)	0.31	0.27	14.8	1.52
Earnings per share from discontinued operation (basic and diluted)	€	2.75	0.04	n.a.	0.00	0.02	(100.0)	0.09
Earnings per share (basic and diluted)	€	3.40	1.09	n.a.	0.31	0.29	6.9	1.61

As a result of the agreement concluded on July 13, 2022, from the third quarter of 2022, the GD tower companies are recognized in the interim consolidated financial statements as discontinued operation. Prior-year comparatives were adjusted retrospectively.

Consolidated statement of comprehensive income

millions of €	H1 2023	H1 2022	Change	Q2 2023	Q2 2022	Change	FY 2022
Profit (loss)	19,034	5,749	13,285	2,623	1,394	1,229	9,482
Items not subsequently reclassified to profit or loss (not recycled)							
Gains (losses) from the remeasurement of equity instruments	(16)	51	(67)	2	39	(37)	(46)
Gains (losses) from the remeasurement of defined benefit plans	216	2,142	(1,926)	(179)	994	(1,173)	1,841
Income taxes relating to components of other comprehensive income	(15)	(619)	604	(37)	(317)	280	(835)
	184	1,574	(1,390)	(214)	715	(929)	961
Items subsequently reclassified to profit or loss (recycled), if certain reasons are given							
Exchange differences on translating foreign operations							
Recognition of other comprehensive income in income statement	4	0	4	4	(2)	6	0
Change in other comprehensive income (not recognized in income statement)	(866)	5,975	(6,841)	189	4,586	(4,397)	4,071
Gains (losses) from the remeasurement of debt instruments							
Recognition of other comprehensive income in income statement	431	512	(81)	211	307	(96)	1,037
Change in other comprehensive income (not recognized in income statement)	(404)	(591)	187	(183)	(354)	171	(1,060)
Gains (losses) from hedging instruments (designated risk components)							
Recognition of other comprehensive income in income statement	(39)	(51)	12	(21)	(84)	63	123
Change in other comprehensive income (not recognized in income statement)	69	547	(478)	57	370	(313)	762
Gains (losses) from hedging instruments (hedging costs)							
Recognition of other comprehensive income in income statement	1	1	0	0	0	0	1
Change in other comprehensive income (not recognized in income statement)	0	(22)	22	(12)	(6)	(6)	(51)
Share of profit (loss) of investments accounted for using the equity method							
Recognition of other comprehensive income in income statement	0	0	0	0	0	0	0
Change in other comprehensive income (not recognized in income statement)	2	0	2	2	0	2	0
Income taxes relating to components of other comprehensive income	(20)	(105)	85	(10)	(57)	47	(231)
	(821)	6,266	(7,087)	237	4,760	(4,523)	4,654
Other comprehensive income	(637)	7,840	(8,477)	23	5,475	(5,452)	5,615
Total comprehensive income	18,398	13,589	4,809	2,646	6,869	(4,223)	15,097
Total comprehensive income attributable to							
Owners of the parent	16,734	10,019	6,715	1,462	4,503	(3,041)	11,272
Non-controlling interests	1,663	3,570	(1,907)	1,183	2,366	(1,183)	3,825

Consolidated statement of changes in equity

millions of €

	Issued capital and reserves attributable to owners of the parent						
	Equity contributed			Consolidated shareholders' equity generated			
	Issued capital	Treasury shares	Capital reserves	Retained earnings including carry-forwards	Net profit (loss)	Translation of foreign operations	Revaluation surplus
Balance at January 1, 2022	12,765	(37)	63,773	(36,358)	4,176	(1,747)	(7)
Changes in the composition of the Group							
Transactions with owners			(1,640)			4	
Unappropriated profit (loss) carried forward				4,176	(4,176)		
Dividends				(3,182)			
Capital increase at Deutsche Telekom AG							
Capital increase from share-based payment			133				
Share buy-back/shares held in a trust deposit		1					
Profit (loss)					5,409		
Other comprehensive income				1,439		2,842	
Total comprehensive income							
Transfer to retained earnings				(14)			3
Balance at June 30, 2022	12,765	(36)	62,266	(33,938)	5,409	1,099	(4)
Balance at January 1, 2023	12,765	(35)	61,532	(34,489)	8,001	221	0
Changes in the composition of the Group							
Transactions with owners			(2,364)			82	
Unappropriated profit (loss) carried forward				8,001	(8,001)		
Dividends				(3,483)			
Capital increase at Deutsche Telekom AG							
Capital increase from share-based payment			131				
Share buy-back/shares held in a trust deposit		7					
Profit (loss)					16,899		
Other comprehensive income				198		(345)	
Total comprehensive income							
Transfer to retained earnings				6			
Balance at June 30, 2023	12,765	(28)	59,299	(29,767)	16,899	(41)	0

Issued capital and reserves attributable to owners of the parent						Total	Non-controlling interests	Total shareholders' equity
Total other comprehensive income								
Equity instruments measured at fair value through other comprehensive income (IFRS 9)	Debt instruments measured at fair value through other comprehensive income (IFRS 9)	Hedging instruments: designated risk components (IFRS 9)	Hedging instruments: hedging costs (IFRS 9)	Investments accounted for using the equity method	Taxes			
143	(37)	(56)	86	0	(22)	42,679	38,790	81,469
						0	(583)	(583)
	(2)	(25)			8	(1,656)	(1,223)	(2,879)
						0	0	0
						(3,182)	(197)	(3,379)
						0	0	0
						133	143	275
						1	0	1
						5,409	340	5,749
52	(38)	450	(22)		(113)	4,610	3,230	7,840
						10,019	3,570	13,589
10						0	0	0
205	(77)	369	64	0	(128)	47,993	40,499	88,492
109	(50)	695	35	0	(227)	48,558	38,762	87,320
						0	(4)	(4)
	(2)	(32)			11	(2,306)	(5,544)	(7,850)
						0	0	0
						(3,483)	(213)	(3,696)
						0	0	0
						131	94	225
						7	0	7
						16,899	2,135	19,034
(16)	14	(18)	1	2	(2)	(165)	(472)	(637)
						16,734	1,663	18,398
(6)						0	0	0
88	(38)	645	36	2	(218)	59,642	34,757	94,399

Consolidated statement of cash flows

millions of €	H1 2023	H1 2022	Change	Q2 2023	Q2 2022	Change	FY 2022
Profit (loss) before income taxes	20,269	7,160	13,109	3,584	1,723	1,861	11,703
Depreciation, amortization and impairment losses	11,900	14,335	(2,435)	5,869	7,570	(1,701)	27,827
(Profit) loss from financial activities	2,954	1,523	1,431	1,623	634	989	4,455
(Profit) loss on the disposal of fully consolidated subsidiaries	(12,924)	(2,553)	(10,371)	4	0	4	(2,661)
(Income) loss from the sale of stakes accounted for using the equity method	(15)	(66)	51	0	(66)	66	(71)
Other non-cash transactions	348	315	33	116	233	(117)	1,508
(Gains) losses from the disposal of intangible assets and property, plant and equipment	2	56	(54)	9	38	(29)	(76)
Change in assets carried as operating working capital	1,313	(433)	1,746	584	(135)	719	(600)
Change in other operating assets	(352)	(73)	(279)	226	9	217	(813)
Change in provisions	(1,235)	(354)	(881)	(768)	289	(1,057)	117
Change in liabilities carried as operating working capital	(804)	372	(1,176)	(443)	(163)	(280)	789
Change in other operating liabilities	765	643	122	264	254	10	(60)
Income taxes received (paid)	(468)	(257)	(211)	(299)	(209)	(90)	(902)
Dividends received	4	3	1	3	1	2	11
Net payments from entering into, canceling or changing the terms and conditions of interest rate derivatives	(31)	0	(31)	0	0	0	0
Cash generated from operations	21,725	20,671	1,054	10,773	10,177	596	41,228
Interest paid	(3,883)	(3,360)	(523)	(2,082)	(1,987)	(95)	(6,756)
Interest received	1,022	668	354	615	431	184	1,347
Net cash from operating activities	18,864	17,979	885	9,306	8,621	685	35,819
Of which: from discontinued operation	80	457	(377)	0	198	(198)	712
Cash outflows for investments in intangible assets	(2,441)	(4,679)	2,238	(1,254)	(1,128)	(126)	(7,551)
Property, plant and equipment	(6,995)	(7,579)	584	(3,356)	(3,958)	602	(16,563)
Non-current financial assets	(203)	(501)	298	(45)	(225)	180	(683)
Payments for publicly funded investments in the broadband build-out	(147)	(162)	15	(81)	(90)	9	(377)
Proceeds from public funds for investments in the broadband build-out	117	129	(12)	67	85	(18)	435
Changes in cash and cash equivalents in connection with the acquisition of control of subsidiaries and associates	(4)	(52)	48	(4)	(1)	(3)	(52)
Proceeds from disposal of intangible assets	0	2	(2)	0	1	(1)	3
Property, plant and equipment	57	82	(25)	34	33	1	436
Non-current financial assets	143	156	(13)	107	115	(8)	173
Changes in cash and cash equivalents in connection with the loss of control of subsidiaries and associates	7,624	4,089	3,535	15	0	15	4,208
Net change in short-term investments and marketable securities and receivables	(423)	(1,633)	1,210	241	(467)	708	(2,335)
Other	(1)	1	(2)	(1)	0	(1)	1
Net cash (used in) from investing activities	(2,274)	(10,148)	7,874	(4,278)	(5,636)	1,358	(22,306)
Of which: from discontinued operation	(17)	(99)	82	0	(59)	59	(277)
Proceeds from issue of current financial liabilities	813	1,212	(399)	44	1,180	(1,136)	9,686
Repayment of current financial liabilities	(6,738)	(3,438)	(3,300)	(1,747)	(2,238)	491	(15,528)
Proceeds from issue of non-current financial liabilities	9,097	1	9,096	3,209	1	3,208	4,534
Repayment of non-current financial liabilities	(1,976)	0	(1,976)	0	0	0	0
Dividend payments (including to other shareholders of subsidiaries)	(3,564)	(3,247)	(317)	(3,558)	(3,247)	(311)	(3,385)
Principal portion of repayment of lease liabilities	(3,201)	(2,415)	(786)	(1,673)	(1,180)	(493)	(4,951)
Cash inflows from transactions with non-controlling entities	14	25	(11)	9	22	(13)	29
Cash outflows from transactions with non-controlling entities	(8,015)	(2,629)	(5,386)	(3,513)	(2,377)	(1,136)	(5,823)
Net cash (used in) from financing activities	(13,570)	(10,491)	(3,079)	(7,230)	(7,838)	608	(15,438)
Of which: from discontinued operation	(74)	(140)	66	0	(48)	48	(192)
Effect of exchange rate changes on cash and cash equivalents	(71)	316	(387)	3	259	(256)	93
Changes in cash and cash equivalents associated with non-current assets and disposal groups held for sale	25	8	17	28	0	28	(18)
Net increase (decrease) in cash and cash equivalents	2,975	(2,336)	5,311	(2,171)	(4,594)	2,423	(1,850)
Cash and cash equivalents, at the beginning of the period	5,767	7,617	(1,850)	10,913	9,875	1,038	7,617
Cash and cash equivalents, at the end of the period	8,742	5,281	3,461	8,742	5,281	3,461	5,767

As a result of the agreement concluded on July 13, 2022, from the third quarter of 2022, the GD tower companies are recognized in the interim consolidated financial statements as discontinued operation. The consolidated statement of cash flows continues to include the discontinued operation in the Group Development operating segment. The top line of the consolidated statement of cash flows is profit before income taxes, which includes the profit of both the continuing operations and the discontinued operation. In the consolidated statement of cash flows, the contributions by the GD tower companies are each stated in a separate "of which" line item.

Significant events and transactions

Accounting policies

In accordance with § 115 et seq. of the German Securities Trading Act (Wertpapierhandelsgesetz – WpHG), Deutsche Telekom AG's half-year financial report comprises interim consolidated financial statements and an interim Group management report as well as a responsibility statement pursuant to § 297 (2) sentence 4 and § 315 (1) sentence 5 of the German Commercial Code (Handelsgesetzbuch – HGB). The interim consolidated financial statements were prepared in accordance with the International Financial Reporting Standards (IFRSs) applicable to interim financial reporting as adopted by the EU as of the reporting date. The interim management report for the Group was prepared in accordance with the German Securities Trading Act.

Statement of compliance

The interim consolidated financial statements for the period ended June 30, 2023 are in compliance with International Accounting Standard (IAS) 34. As permitted by IAS 34, it has been decided to publish a condensed version compared to the consolidated financial statements as of December 31, 2022. All IFRSs applied by Deutsche Telekom AG have been adopted by the European Commission for use within the EU.

In the opinion of the Board of Management, the reviewed half-year financial report includes all standard adjustments to be applied on an ongoing basis that are required to give a true and fair view of the results of operations and financial position of the Group. Please refer to the [notes to the consolidated financial statements](#) as of December 31, 2022 for the accounting policies applied for the Group's financial reporting.

Initial application of standards, interpretations, and amendments in the reporting period

Pronouncement	Title	To be applied by Deutsche Telekom from	Changes	Impact on the presentation of Deutsche Telekom's results of operations and financial position
IFRSs endorsed by the EU				
IFRS 17	Insurance Contracts	Jan. 1, 2023	IFRS 17 governs the accounting for insurance contracts and replaces IFRS 4.	No material impact.
Amendments to IFRS 17	Insurance Contracts	Jan. 1, 2023	The initial application of IFRS 17 is postponed until January 1, 2023. The fundamental principles under IFRS 17 remain unaffected. The amendments to IFRS 17 are aimed at helping entities implement the standard and, at the same time, avoiding a significant loss of useful information. The option for companies to delay application of IFRS 9 until the initial application of IFRS 17 has also been extended until January 1, 2023.	No material impact.
Amendments to IFRS 17	Initial Application of IFRS 17 and IFRS 9 – Comparative information	Jan. 1, 2023	Supplementary transition option relating to comparatives in the first reporting year, which allows for the option of a different classification pursuant to IFRS 9 (classification overlay) for the comparative periods in the year of first-time application of both standards. In addition, for financial assets that relate to insurance contracts, existing classification options under IFRS 9 can be exercised again if IFRS 9 was applied prior to the first-time application of IFRS 17.	No material impact.
Amendments to IAS 1 and IFRS Practice Statement 2	Presentation of Financial Statements	Jan. 1, 2023	The amendments to IAS 1 will require entities to disclose their material accounting policies in the future rather than their significant accounting policies. The amendments to IFRS Practice Statement 2 "Making Materiality Judgements" contain guidance on applying materiality judgments to accounting policy disclosures.	No material impact.
Amendments to IAS 8	Definition of Accounting Estimates	Jan. 1, 2023	The amendments relate to the definition of accounting estimates. It is clarified how entities can distinguish between changes to accounting policies and to accounting estimates.	No material impact.
Amendments to IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	Jan. 1, 2023	IAS 12 provides for exemptions to the recognition of deferred taxes in specific cases. It was previously unclear as to whether the initial recognition exemptions also apply for transactions in which the initial recognition of an asset and a liability gives rise to equal taxable and deductible temporary differences. The exemptions apply specifically to leases and restoration obligations. The IASB now clarifies that the exemption relating to the recognition of deferred taxes is not applicable in the aforementioned cases.	No material impact.

For further information on standards, interpretations, and amendments that have been issued but not yet applied, as well as disclosures on the recognition and measurement of items in the statement of financial position and discretionary decisions and estimation uncertainties, please refer to the section "Summary of accounting policies" in the notes to the consolidated financial statements in the [2022 Annual Report](#).

Changes in accounting policies and changes in the reporting structure

Deutsche Telekom did not make any major changes to its accounting policies in the reporting period. The following change was made to the reporting structure:

Change in reporting of revenue by revenue categories. Effective January 1, 2023, the previously reported breakdown of revenues by revenue category (from the rendering of services, from the sale of goods and merchandise, and from the use of entity assets by others) was replaced by a breakdown into service revenues and non-service revenues in line with the Group's management model. In addition, effective January 1, 2023, the definition of service revenues was extended as follows: Certain software revenues generated with ICT business in the Systems Solutions and Europe operating segments, as well as in the Group Headquarters & Group Services segment, have been included since this date. Comparative figures have been adjusted retrospectively.

For further information on revenues, please refer to the section ["Selected notes to the consolidated income statement."](#)

Development of the economic environment and impact on financial reports

The macroeconomic challenges currently facing society, politics, and business are multi-faceted and often interdependent, such as the rise in energy prices, the ongoing high rate of inflation, the rise in interest rate levels, political developments, including those concerning dealings with Chinese vendors of telecommunications components, geopolitical tensions, and the war in Ukraine. This results in substantial uncertainty in terms of global economic development. Deutsche Telekom is aware that, in view of the current developments, it is only possible to extrapolate past experience to the future to a limited extent. Deutsche Telekom is constantly reassessing the challenges and takes them into account in its consolidated financial statements and financial reporting, e.g., when testing the impairment of goodwill, the recognition of deferred taxes, and the measurement of provisions and financial instruments.

Changes in the underlying parameters primarily relate to the exchange rates used for currency translation and to the interest rates for determining defined benefit obligations.

The euro exchange rates of certain significant currencies changed as follows:

€	Rate at the reporting date			Annual average rate	
	June 30, 2023	Dec. 31, 2022	June 30, 2022	H1 2023	H1 2022
	100 Czech korunas (CZK)	4.20991	4.14345	4.04139	4.22093
100 Croatian kuna (HRK) ^a	n.a.	13.27230	13.27840	n.a.	13.28860
1,000 Hungarian forints (HUF)	2.68807	2.49707	2.51566	2.62377	2.51843
100 Macedonian denars (MKD)	1.63422	1.62299	1.62405	1.62295	1.62386
100 Polish zlotys (PLN)	22.52990	21.34570	21.32330	21.60930	21.51700
1 U.S. dollar (USD)	0.92115	0.93655	0.96219	0.92540	0.94632

^a Croatia joined the eurozone as of January 1, 2023.

The following key discount rates were used when calculating the present value of defined benefit obligations:

%	June 30, 2023	Dec. 31, 2022
	Germany	4.01
United States	5.40	5.59
Switzerland	1.96	2.42

Changes in the composition of the Group and other transactions

In the first half of 2023, Deutsche Telekom conducted the following transactions, which had an impact on the composition of the Group. Other changes to the composition of the Group not shown here were of no material significance for Deutsche Telekom's interim consolidated financial statements.

Sale of the GD tower companies

On July 13, 2022, Deutsche Telekom agreed to sell a 51.0 % stake in the cell tower business companies in Germany and Austria (GD tower companies), hitherto assigned to the Group Development operating segment, to DigitalBridge and Brookfield. The sale price is based on an enterprise value of EUR 17.5 billion. Since closing of the transaction on February 1, 2023, Deutsche Telekom has lost control over the GD tower companies. All necessary regulatory approvals had been duly granted and all other closing conditions met. The total preliminary gain on deconsolidation resulting from the sale amounts to EUR 15.9 billion, of which EUR 12.9 billion is included as other operating income in profit/loss after taxes from discontinued operation as of the deconsolidation date. The remaining EUR 3.0 billion will be recognized pro rata in later periods due to the sale-and-leaseback transaction described below. The stake retained by Deutsche Telekom of 49.0 % has been included in the consolidated financial statements using the equity method since February 1, 2023. The carrying amount of the investment amounted to EUR 6.1 billion as of June 30, 2023.

As a result of the sales agreement, the GD tower companies had been recognized in the interim consolidated financial statements as discontinued operation from the third quarter of 2022 until their sale on February 1, 2023. The consolidated income statement was adjusted with retrospective effect in the comparative period. Thus, the contributions by the GD tower companies were no longer included in the individual items of the consolidated income statement. Instead, profit or loss after taxes was recognized in the item "Profit/loss after taxes from discontinued operation." Assets and the directly associated liabilities have been shown as held for sale in the consolidated statement of financial position since December 31, 2022. In the consolidated statement of cash flows, the contributions by the GD tower companies have each been stated in a separate "of which" line item.

For further information on the assets and liabilities of the GD tower companies included in the consolidated financial statements as of December 31, 2022, please refer to Note 5 "Non-current assets and disposal groups held for sale and liabilities directly associated with non-current assets and disposal groups held for sale" in the notes to the consolidated financial statements in the [2022 Annual Report](#).

Once the transaction was consummated, Deutsche Telekom leased back the majority of the sold passive network infrastructure in Germany and Austria under a sale-and-leaseback agreement with a non-cancellable basic lease term of eight years. Overall, lease liabilities were recognized in the amount of EUR 5.0 billion and, as a result of the sale-and-leaseback agreement, retained right-of-use assets in the amount of EUR 2.0 billion. The portion of the gain attributable to the retained use of the sold assets, amounting to EUR 3.0 billion, will have an impact in later periods by way of lower depreciation of the capitalized right-of-use assets. Furthermore, deferred tax assets of EUR 0.9 billion were recognized in the consolidated statement of financial position.

The preliminary cash inflow totaling EUR 10.7 billion resulting from the sale of the GD tower companies is recognized in the consolidated statement of cash flows as of June 30, 2023, with EUR 7.6 billion relating to the sale of the business operation recognized under net cash from/used in investing activities and EUR 3.1 billion relating to the sale and leaseback of the passive mobile infrastructure recognized under net cash from/used in financing activities.

Sale of the U.S. wireline business

On September 6, 2022, T-Mobile US reached an agreement with Cogent Infrastructure (Cogent) on the sale of T-Mobile US' fiber-optic-based wireline business. Under the agreement, Cogent will take over all shares in the entity that holds all of the assets and liabilities related to the former Sprint's fiber-optic-based wireline network. The transaction was consummated on May 1, 2023. All necessary regulatory approvals had been duly granted and all other closing conditions met. The sale price was USD 1 and was subject to customary adjustments laid down in the purchase agreement. The cash proceeds received upon completion of the transaction amounted to USD 14 million (EUR 13 million). The loss on deconsolidation resulting from the sale amounted to EUR 4 million. In addition, upon completion of the transaction, T-Mobile US undertook to enter into a separate agreement on IP transit services, according to which T-Mobile US will pay a total of USD 0.7 billion (around EUR 0.6 billion) in agreed installments in subsequent periods to Cogent. In connection with the payment obligations entered into as part of the transaction, total liabilities of EUR 0.7 billion had already been recognized in the 2022 financial year. These liabilities included, under financial liabilities, the present value of the future payments for IP transit services. Since a specific use for these services has not been identified, the corresponding expense was already recognized in full in the 2022 financial year under other operating expenses.

As a result of the concluded sales agreement, the assets and liabilities of the wireline business were reported in the consolidated statement of financial position as "held for sale" from September 30, 2022 up until their sale on May 1, 2023.

The following transaction will change the composition of the Deutsche Telekom Group in the future:

Agreement on the acquisition of Ka'ena in the United States

On March 9, 2023, T-Mobile US entered into a Merger and Unit Purchase Agreement for the acquisition of 100 % of the outstanding equity of Ka'ena Corporation and its subsidiaries including, among others, Mint Mobile, for a maximum purchase price of USD 1.35 billion to be paid out 39 % in cash and 61 % in shares of T-Mobile US common stock. Ka'ena Corporation is currently one of the wholesale partners of T-Mobile US, offering wireless telecommunications services to customers. The purchase price is variable dependent upon specified performance indicators of Ka'ena Corporation during certain periods before and after closing and consists of an upfront payment at deal close, subject to certain agreed-upon adjustments, and a variable earnout payable 24 months after the close of the transaction. The upfront payment is expected to be approximately USD 950 million, before working capital adjustments. The acquisition is subject to certain customary closing conditions, including certain regulatory approvals, and is expected to close by the end of 2023.

Other transactions that had no effect on the composition of the Group

Share buy-back program at T-Mobile US

In the period from January 1, 2023 to June 30, 2023, T-Mobile US bought back around 58 million additional shares with a total volume of USD 8.3 billion (EUR 7.7 billion) under the share buy-back program announced on September 8, 2022.

As of June 30, 2023, Deutsche Telekom's stake in T-Mobile US amounted to 48.0 %. Taking the treasury shares held by T-Mobile US into account, Deutsche Telekom had a 51.3 % stake in T-Mobile US as of June 30, 2023. The percentage of T-Mobile US shares for which Deutsche Telekom can exercise voting rights, based on an agreement concluded with SoftBank in connection with the acquisition of Sprint, amounted to 55.1 % as of June 30, 2023.

In the period from July 1, 2023 to July 21, 2023, T-Mobile US bought back around 4.0 million additional shares with a total volume of USD 0.6 billion (EUR 0.5 billion) under the share buy-back program.

Selected notes to the consolidated statement of financial position

Trade receivables

At EUR 15.8 billion, trade receivables decreased by EUR 1.0 billion against the 2022 year-end level. This was due to lower receivables in the United States and Germany operating segments. Exchange rate effects, mainly from the translation of U.S. dollars into euros, also decreased the carrying amount. By contrast, receivables increased in the Europe operating segment.

Contract assets

The carrying amount of contract assets at the reporting date totaled EUR 2.5 billion compared with EUR 2.4 billion as of December 31, 2022. Contract assets relate to receivables that have not yet legally come into existence, which arise from the earlier – as compared to billing – recognition of revenue, in particular from the sale of goods and merchandise. Furthermore, receivables from long-term construction contracts are recognized under contract assets.

Inventories

The carrying amount of inventories decreased by EUR 0.4 billion to EUR 2.2 billion, driven by the sale of older terminal equipment and reduced stocks due to the closure of former Sprint sites in the United States operating segment. Stockpiling in the fixed network for the fiber-optic build-out in Germany and for terminal equipment in the Germany operating segment had an offsetting effect.

Intangible assets

The carrying amount of intangible assets decreased by EUR 2.6 billion compared to December 31, 2022 to EUR 138.0 billion, mainly due to amortization and impairment losses of EUR 3.3 billion. Exchange rate effects, primarily from the translation of U.S. dollars into euros, also decreased the carrying amount by EUR 1.8 billion. By contrast, additions increased the carrying amount by EUR 2.5 billion. Of these additions, EUR 0.3 billion related to the acquisition of mobile spectrum in the Europe and United States operating segments.

On August 8, 2022, T-Mobile US entered into agreements with Channel 51 License Co LLC and LB License Co, LLC (Sellers) for the acquisition of spectrum licenses in the 600 MHz band for an aggregate purchase price of USD 3.5 billion (EUR 3.4 billion). The licenses are to be acquired without any associated network assets. T-Mobile US currently utilizes these licenses under an existing arrangement with the Sellers covering fixed-term spectrum leases. On March 30, 2023, the contractual parties further agreed that the transaction be divided into two separate tranches. The transfer of the licenses in accordance with the agreements is subject to regulatory approvals and certain other customary closing conditions. The first tranche is expected to be concluded by the end of 2023, while the second tranche is expected to be concluded in 2024.

On July 1, 2020, T-Mobile US and DISH Network Corporation (DISH) reached an agreement on the sale of spectrum licenses, under which DISH receives an option to purchase certain 800 MHz spectrum licenses from T-Mobile US for USD 3.6 billion (EUR 3.5 billion). The transaction is subject to approval by the Federal Communications Commission (FCC). Pursuant to the agreement, the application for approval would have had to be filed with the FCC at the latest by June 1, 2023. As of July 27, 2023, DISH has not fulfilled this obligation. At the request of the U.S. Department of Justice, T-Mobile US agreed not to take action to terminate the agreement until August 11, 2023. If the application is filed with the FCC before this date, and the FCC subsequently approves the transaction, the contractual parties are obligated to close the transaction within five days following approval. In the event of a breach of contract, DISH would have to pay a contractual penalty of USD 72 million to T-Mobile US. However, should the transaction not be closed by April 1, 2024, without breach of contract, both parties are entitled to terminate the agreement. In this case, DISH would not be required to pay a contractual penalty. If DISH does not exercise its option to purchase the 800 MHz spectrum licenses, T-Mobile US is obligated to put the licenses up for sale at auction. Should bidding not reach the defined minimum purchase price of USD 3.6 billion, T-Mobile US would be released from its obligation to sell the licenses.

Property, plant and equipment

The carrying amount of property, plant and equipment increased by EUR 0.1 billion compared to December 31, 2022 to EUR 65.8 billion. Additions, primarily for the upgrade and build-out of the network (broadband, fiber-optic, and mobile infrastructure build-out) increased the carrying amount by EUR 6.4 billion. Depreciation charges of EUR 5.9 billion had a decreasing effect. Exchange rate effects of EUR 0.4 billion, primarily from the translation of U.S. dollars into euros, and disposals of EUR 0.2 billion also reduced the carrying amount.

Right-of-use assets

The carrying amount of the right-of-use assets increased by EUR 0.6 billion compared to December 31, 2022 to EUR 34.3 billion. The carrying amount was increased by additions of EUR 4.0 billion, mainly resulting from the sale and leaseback of passive network infrastructure in Germany and Austria in connection with the sale of the GD tower companies. In this context, retained right-of-use assets of EUR 2.0 billion were recognized in the consolidated statement of financial position. Depreciation and impairment losses decreased the carrying amount by EUR 2.8 billion. This included a EUR 0.2 billion increase in depreciation due to a reduction in the useful life of leased network technology for cell sites in the United States operating segment following the business combination of T-Mobile US and Sprint. Exchange rate effects of EUR 0.5 billion, primarily from the translation of U.S. dollars into euros, and disposals of EUR 0.1 billion reduced the carrying amount.

For further information on the sale of the GD tower companies, please refer to the section [“Changes in the composition of the Group and other transactions.”](#)

Capitalized contract costs

As of June 30, 2023, the carrying amount of capitalized contract costs was up by EUR 0.1 billion against the level of December 31, 2022 to EUR 3.4 billion. The capitalized contract costs primarily relate to the United States, Germany, and Europe operating segments.

Investments accounted for using the equity method

The carrying amount of investments accounted for using the equity method increased by EUR 6.0 billion compared to December 31, 2022, to EUR 7.3 billion, essentially as a result of the sale of the 51.0 % stake in the GD tower companies. Following the loss of control pursuant to the IFRSs as a result of the transaction, the companies were deconsolidated as of February 1, 2023. Since this date, the remaining 49.0 % of the shares have been included in the consolidated financial statements as an investment accounted for using the equity method. The carrying amount of the investment amounted to EUR 6.1 billion as of June 30, 2023.

For further information on the sale of the GD tower companies, please refer to the section [“Changes in the composition of the Group and other transactions.”](#)

Other financial assets

millions of €	June 30, 2023	Dec. 31, 2022
	Total	Total
Originated loans and receivables	4,634	4,315
Other receivables – publicly funded projects	2,074	2,019
Debt instruments – measured at fair value through profit or loss	695	646
Derivative financial assets	2,174	2,273
Of which: derivatives with a hedging relationship	1,043	1,034
Of which: derivatives without a hedging relationship	1,131	1,239
Equity instruments – measured at fair value through profit or loss	4	3
Equity instruments – measured at fair value through other comprehensive income	441	446
Lease assets	182	205
Other	3	3
	10,206	9,910

The carrying amount of current and non-current other financial assets increased by EUR 0.3 billion compared to December 31, 2022 to EUR 10.2 billion.

The net total of originated loans and receivables increased by EUR 0.3 billion to EUR 4.6 billion. The carrying amount was increased by an existing shareholder loan to the GD tower companies, which must be recognized in the consolidated statement of financial position as a result of the deconsolidation of the companies. As of June 30, 2023, this loan had a carrying amount of EUR 0.3 billion. In addition, government bonds were bought during the course of the year under short-term investments. As of June 30, 2023, they had a carrying amount of EUR 0.2 billion.

In connection with receivables from grants still to be received from funding projects for the broadband build-out in Germany, the carrying amount of other receivables increased by EUR 0.1 billion to EUR 2.1 billion.

For further information on cash collateral deposited and on derivatives, please refer to the section [“Disclosures on financial instruments.”](#)

For further information on the sale of the GD tower companies, please refer to the section [“Changes in the composition of the Group and other transactions.”](#)

Other assets

The carrying amount of current and non-current other assets increased by EUR 0.5 billion to EUR 3.8 billion. As of June 30, 2023, the carrying amount included various advance payments, totaling EUR 3.0 billion (December 31, 2022: EUR 2.7 billion), mainly including advance payments for maintenance, repairs, and in connection with agreements on services for certain mobile communications equipment that do not fall under the scope of IFRS 16. Receivables from other taxes also increased.

Non-current assets and disposal groups held for sale

The carrying amount of non-current assets and disposal groups held for sale decreased by EUR 4.6 billion compared with December 31, 2022 to EUR 0.1 billion. The sale of the GD tower companies as of February 1, 2023 reduced the carrying amount by EUR 4.2 billion, and the sale of the wireline business at T-Mobile US as of May 1, 2023 by EUR 0.3 billion. The corresponding assets had previously been reported as held for sale on account of the sales agreements concluded.

For further information on the corporate transactions, please refer to the section [“Changes in the composition of the Group and other transactions.”](#)

Financial liabilities and lease liabilities

The following table shows the composition and maturity structure of **financial liabilities** as of June 30, 2023:

millions of €	June 30, 2023	Due within 1 year	Due > 1 ≤ 5 years	Due > 5 years	Dec. 31, 2022
Bonds and other securitized liabilities	91,822	8,103	27,970	55,749	93,802
Liabilities to banks	3,610	1,331	1,224	1,055	4,122
Liabilities with the right of creditors to priority repayment in the event of default	2,533	822	1,711	0	2,925
Other interest-bearing liabilities	7,149	1,243	2,752	3,153	7,526
Liabilities from deferred interest	1,036	1,036	0	0	999
Other non-interest-bearing liabilities	1,006	854	132	20	769
Derivative financial liabilities	2,825	157	860	1,808	2,889
Financial liabilities	109,980	13,547	34,649	61,785	113,030
Lease liabilities	41,999	5,394	16,299	20,306	38,792

The carrying amount of current and non-current financial liabilities decreased by EUR 3.1 billion compared with year-end 2022 to EUR 110.0 billion, primarily due to the factors described below. Exchange rate effects, in particular from the translation of U.S. dollars into euros, lowered the carrying amount by EUR 1.3 billion.

The carrying amount of bonds and other securitized liabilities decreased by EUR 2.0 billion to EUR 91.8 billion. Exchange rate effects decreased the carrying amount of bonds and other securitized liabilities by EUR 1.2 billion. Early repayments in the Group of premature buybacks of bonds with terms ending between 2023 and 2028, made in February and March 2023, including EUR bonds of EUR 2.4 billion, GBP bonds of GBP 0.2 billion (EUR 0.3 billion), and USD bonds of USD 0.6 billion (EUR 0.6 billion) reduced the carrying amount. It was further reduced by the scheduled repayments of EUR bonds in the amount of EUR 1.3 billion and by net repayments of commercial paper in the amount of EUR 2.3 billion. The carrying amount was increased by senior notes issued in the reporting period by T-Mobile US with a total volume of USD 6.5 billion (EUR 6.0 billion) with terms ending between 2028 and 2054 and bearing interest of between 4.80 % and 5.75 %. In addition, the carrying amount increased by EUR 0.2 billion in connection with measurement effects from derivatives with a hedging relationship, the offsetting entry for which is posted under bonds and other securitized liabilities.

The carrying amount of liabilities to banks decreased by EUR 0.5 billion compared with December 31, 2022 to EUR 3.6 billion, mainly due to scheduled repayments of EUR 0.3 billion and by the net increase of EUR 0.2 billion in the balance of short-term borrowings.

The liabilities with the right of creditors to priority repayment in the event of default of EUR 2.5 billion (December 31, 2022: EUR 2.9 billion) relate primarily to bonds issued by Sprint. Collateral was provided for these bonds, hence they constitute a separate class of financial instruments. The main factor reducing the carrying amount was repayments in the reporting period in the amount of EUR 0.3 billion when translated into euros. At the reporting date, cash and cash equivalents with a carrying amount of EUR 68 million (December 31, 2022: EUR 63 million) when translated into euros were pledged as collateral for these bonds.

The carrying amount of other interest-bearing liabilities decreased by EUR 0.4 billion compared with December 31, 2022 to EUR 7.1 billion. The main reducing factors were repayments at T-Mobile US, accounting for EUR 0.2 billion, and exchange rate effects, in particular from the translation of U.S. dollars into euros, accounting for EUR 0.1 billion.

The carrying amount of derivative financial liabilities decreased by EUR 0.1 billion to EUR 2.8 billion. This was primarily driven by the early termination of a forward transaction to hedge the price of acquiring T-Mobile US shares in the future.

For further information on derivative financial liabilities, please refer to the section [“Disclosures on financial instruments.”](#)

The carrying amount of current and non-current **lease liabilities** increased by EUR 3.2 billion to EUR 42.0 billion compared with December 31, 2022, mainly resulting from the sale and leaseback of passive network infrastructure in Germany and Austria in connection with the sale of the GD tower companies. As a result of this transaction, lease liabilities increased by EUR 5.0 billion. By contrast, lease liabilities in the United States operating segment decreased by EUR 1.1 billion due to the decommissioning of the former Sprint’s wireless network, the closure of former Sprint shops, and a decline in network and build-out investments, primarily on account of higher capital efficiency resulting from the accelerated build-out of the nationwide 5G network in the prior year. Exchange rate effects, in particular from the translation of U.S. dollars into euros, reduced the carrying amount by EUR 0.5 billion.

For further information on the sale of the GD tower companies, please refer to the section [“Changes in the composition of the Group and other transactions.”](#)

Trade and other payables

The carrying amount of trade and other payables decreased by EUR 1.7 billion to EUR 10.4 billion, due in particular to lower liabilities in the United States operating segment, primarily due to a seasonally lower procurement volume and exchange rate effects with a reducing effect. By contrast, the Germany operating segment recorded an increase in liabilities.

Provisions for pensions and other employee benefits

The carrying amount of provisions for pensions and other employee benefits decreased by EUR 0.3 billion as of December 31, 2022 to EUR 3.9 billion, mainly due to an increase in the fair values of plan assets. The decline in the discount rate compared with December 31, 2022 had an offsetting effect. Overall, the remeasurement of defined benefit plans resulted in an actuarial gain of EUR 0.2 billion to be recognized directly in equity.

Current and non-current other provisions

The carrying amount of current and non-current other provisions decreased by EUR 1.0 billion compared with the end of 2022 to EUR 7.2 billion. Other provisions for personnel costs decreased by EUR 0.3 billion, mainly in connection with the performance-based remuneration components for the prior year paid out to employees in the first half of 2023. By contrast, other provisions for personnel costs recognized for the Civil Service Health Insurance Fund (Postbeamtenkrankenkasse – PBeaKK) increased as a result of the subsequent measurement of the present value determined using actuarial principles due to the decline in the interest rate level. Provisions for procurement and sales support decreased by EUR 0.3 billion, mainly in connection with the bonuses paid out to sales partners in the United States operating segment. Provisions for restoration obligations also decreased by EUR 0.2 billion, due in particular to the decommissioning of the former Sprint mobile network and due to shop closures. Exchange rate effects, in particular from the translation of U.S. dollars into euros, also contributed to the decrease in the carrying amount.

Other liabilities

The carrying amount of current and non-current other liabilities increased from EUR 5.6 billion to EUR 5.9 billion, mainly due to an increase in liabilities from other taxes. Liabilities due to existing build-out obligations in connection with grants still to be received from funding projects for the broadband build-out in Germany remained unchanged compared with December 31, 2022 at EUR 1.7 billion.

Contract liabilities

The carrying amount of current and non-current contract liabilities increased by EUR 0.3 billion compared with December 31, 2022 to EUR 2.9 billion. These substantially include deferred revenues. The increase was mainly due to higher contract liabilities in the Germany operating segment.

Liabilities directly associated with non-current assets and disposal groups held for sale

The carrying amount of liabilities directly associated with non-current assets and disposal groups held for sale decreased by EUR 3.3 billion against December 31, 2022 to EUR 0.0 billion. The sale of the GD tower companies as of February 1, 2023 reduced the carrying amount by EUR 3.0 billion, and the sale of the wireline business at T-Mobile US as of May 1, 2023 by EUR 0.4 billion. The corresponding liabilities had previously been reported as held for sale on account of the sales agreements concluded.

For further information on the corporate transactions, please refer to the section [“Changes in the composition of the Group and other transactions.”](#)

Shareholders' equity

The carrying amount of shareholders' equity increased from EUR 87.3 billion as of December 31, 2022 to EUR 94.4 billion, with profit of EUR 19.0 billion and capital increases from share-based payments of EUR 0.2 billion having an increasing effect. By contrast, transactions with owners reduced shareholders' equity by EUR 7.9 billion, mainly in connection with the share buy-back program at T-Mobile US. Shareholders' equity was reduced in connection with dividend payments for the 2022 financial year to Deutsche Telekom AG shareholders in the amount of EUR 3.5 billion and to other shareholders of subsidiaries in the amount of EUR 0.2 billion. Other comprehensive income also decreased the carrying amount by EUR 0.6 billion. The main factors here were negative currency translation effects recognized directly in equity amounting to EUR 0.9 billion, offset by a positive effect of EUR 0.2 billion from the remeasurement of defined benefit plans.

For further information on the increase of the stake in T-Mobile US, please refer to the section [“Other transactions that had no effect on the composition of the Group.”](#)

The following table shows the changes in the composition of the Group and the development of transactions with owners:

millions of €	June 30, 2023			Dec. 31, 2022		
	Issued capital and reserves attributable to owners of the parent	Non-controlling interests	Total shareholders' equity	Issued capital and reserves attributable to owners of the parent	Non-controlling interests	Total shareholders' equity
Changes in the composition of the Group	0	(4)	(4)	0	(583)	(583)
Sale of T-Mobile Netherlands	0	0	0	0	(583)	(583)
Other effects	0	(4)	(4)	0	0	0
Transactions with owners	(2,306)	(5,544)	(7,850)	(2,569)	(3,428)	(5,997)
T-Mobile US share buy-back/share-based payment	(2,304)	(5,443)	(7,746)	(978)	(1,994)	(2,972)
OTE share buy-back	(19)	(40)	(59)	(100)	(190)	(290)
Hrvatski Telekom share buy-back	(1)	(5)	(6)	(2)	(22)	(24)
Increase of the stake in T-Mobile US	0	0	0	(1,493)	(1,178)	(2,672)
Magyar Telekom share buy-back	17	(56)	(39)	15	(53)	(38)
Other effects	0	0	0	(10)	9	(1)

Selected notes to the consolidated income statement

As a result of the sales agreement concluded on July 13, 2022, the GD tower companies had been recognized as a discontinued operation from the third quarter of 2022 until their sale on February 1, 2023. The relevant comparative period in the consolidated income statement was adjusted with retrospective effect. Thus, the contributions by the GD tower companies were no longer included in the individual items of the consolidated income statement. Instead, profit or loss after taxes was disclosed in aggregate form in the item "Profit/loss after taxes from discontinued operation."

For further information on the sale of the GD tower companies, please refer to the section "Changes in the composition of the Group and other transactions."

Net revenue

Net revenue breaks down into the following revenue categories:

millions of €	H1 2023	H1 2022
Service revenues	45,770	44,674
Germany	10,901	10,645
United States	28,903	27,810
Europe	4,715	4,551
Systems Solutions	1,855	1,844
Group Development	0	411
Group Headquarters & Group Services	482	514
Reconciliation	(1,085)	(1,102)
Non-service revenues	9,275	10,854
Germany	1,389	1,356
United States	6,915	8,510
Europe	969	860
Systems Solutions	50	25
Group Development	7	134
Group Headquarters & Group Services	648	706
Reconciliation	(704)	(737)
Net revenue	55,045	55,528

The breakdown of revenues by revenue category was changed in line with the Group's management model, effective January 1, 2023. Comparative figures have been adjusted retrospectively.

For further information on this change, please refer to the section "Changes in accounting policies and changes in the reporting structure."

The service revenues essentially comprise predictable and/or recurring revenues from Deutsche Telekom's core activities. These relate to revenues that are generated from services (i.e., revenues from fixed and mobile network voice services, incoming and outgoing calls, as well as data services) plus roaming revenues, monthly basic charges and visitor revenues, as well as revenues from the ICT business. Service revenues also include revenues earned in connection with premium services for customers, such as reinsurance for device insurance policies and extended warranties. Revenue from insurance contracts in the scope of IFRS 17 in the Group amounted to EUR 2.3 billion (H1 2022: EUR 2.3 billion).

Non-service revenues mainly comprise one-time and variable revenues, e.g., revenue from the sale or rental of fixed-network or mobile devices, from value-added services, from application and contract services, revenue with virtual network operators, one-time revenue from the build-out of technical infrastructure, and revenue from vehicle and property leasing.

Net revenue includes revenue from the use of entity assets by others in the scope of IFRS 16 in the amount of EUR 0.6 billion (H1 2022: EUR 1.3 billion). Of the revenue from the use of entity assets by others reported in net revenue, EUR 0.4 billion (H1 2022: EUR 0.4 billion) relates to service revenues and EUR 0.2 billion (H1 2022: EUR 0.9 billion) to non-service revenues.

For further information on changes in net revenue, please refer to the section "[Development of business in the Group](#)" in the interim Group management report.

Other operating income

millions of €	H1 2023	H1 2022
Income from the reversal of impairment losses on non-current assets	1	2
Income from the disposal of non-current assets	135	37
Income from reimbursements	64	67
Income from insurance compensation	90	132
Income from ancillary services	25	12
Miscellaneous other operating income	313	3,205
Of which: gains resulting from deconsolidations and from the sale of stakes accounted for using the equity method	19	2,619
	628	3,455

Income from insurance compensation in the first half of 2023 mainly relates to further refunds from insurance companies for expenses incurred in connection with the cyberattack on T-Mobile US in August 2021. In the prior year, this income mainly resulted from payments on account from insurance companies in connection with damage sustained in the catastrophic flooding in North Rhine-Westphalia and Rhineland-Palatinate in July 2021. Gains resulting in the prior year from the deconsolidation and sale of stakes accounted for using the equity method were attributable to the loss of control over the GlasfaserPlus entities (EUR 1.7 billion) and the sale of T-Mobile Netherlands (EUR 0.9 billion). Other operating income in the prior year also included a payment of EUR 0.2 billion in connection with the settlement of a series of patent disputes between T-Mobile US and a competitor.

For further information on the sale of the GD tower companies, please refer to the section "[Changes in the composition of the Group and other transactions.](#)"

Other operating expenses

millions of €	H1 2023	H1 2022
Impairment losses on financial assets	(524)	(602)
Gains (losses) from the write-off of financial assets measured at amortized cost	(4)	(18)
Other	(1,959)	(2,110)
Legal and audit fees	(228)	(576)
Losses from asset disposals	(137)	(91)
Income (losses) from the measurement of factoring receivables	0	(2)
Other taxes	(334)	(320)
Cash and guarantee transaction costs	(307)	(294)
Insurance expenses	(90)	(81)
Miscellaneous other operating expenses	(863)	(746)
Of which: losses resulting from deconsolidations and from the sale of stakes accounted for using the equity method	(4)	0
	(2,488)	(2,729)

Expenses for legal and audit fees in the prior year included EUR 0.4 billion for the settlement reached and the further proceedings pending in consequence of the cyberattack on T-Mobile US in August 2021. Miscellaneous other operating expenses include expenses of EUR 0.3 billion for data storage in data centers, in cloud applications, or other IT services, and of EUR 0.2 billion for regulatory duties in the United States.

Depreciation, amortization and impairment losses

At EUR 11.9 billion, depreciation, amortization and impairment losses on intangible assets, property, plant and equipment, and right-of-use assets were EUR 2.2 billion lower in the first half of 2023 than in the prior-year period, with the decrease being mainly attributable to the United States operating segment. Depreciation and amortization at T-Mobile US were lower due to the ongoing strategic withdrawal from the terminal equipment lease business. Depreciation and amortization also decreased due to the complete write-off of certain 4G network components, including assets affected by the decommissioning of the former Sprint's legacy CDMA and LTE networks in 2022. The decrease was offset by increased depreciation and amortization in connection with the further build-out of the nationwide 5G network in the United States. In addition, a further reduction in the useful life of leased network technology for cell sites following the business combination of T-Mobile US and Sprint increased depreciation of the corresponding right-of-use assets by EUR 0.2 billion. At EUR 0.1 billion, no significant impairment losses were recorded in the reporting period. The impairment losses recorded in the prior-year period of EUR 0.5 billion were mainly attributable to the former Sprint's fiber-optic-based wireline assets in the United States operating segment.

Profit/loss from financial activities

Loss from financial activities increased year-on-year from EUR 1.5 billion to EUR 2.9 billion, with other financial income declining from EUR 1.0 billion to a financial expense of EUR 0.1 billion, in particular in connection with the interest component from the measurement of provisions and liabilities. This decrease was mainly attributable to the subsequent measurement using actuarial principles of the present value of the provision recognized for the Civil Service Health Insurance Fund. Gains/losses from financial instruments also declined year-on-year by EUR 0.3 billion to EUR 0.1 billion, partly due to less pronounced positive measurement effects compared with the prior-year period from a forward transaction which was terminated early in the first quarter of 2023 to hedge the price of acquiring T-Mobile US shares in the future. Finance costs increased from EUR 2.5 billion to EUR 2.9 billion, mainly due to the sale and leaseback of passive network infrastructure in Germany and Austria in connection with the sale of the GD tower companies, which resulted in an increase in the carrying amounts of the lease liabilities, and due to an increase in the average interest rates of financial liabilities.

For further information on embedded derivatives at T-Mobile US, please refer to the section "[Disclosures on financial instruments.](#)"

Income taxes

A tax expense of EUR 1.9 billion was recorded in the first half of 2023. The tax amount reflects the shares of the different countries in profit before income taxes and their respective national tax rates. In the prior-year period, a tax expense of EUR 1.3 billion was recognized on the higher profit/loss before income taxes, which also essentially reflects the respective national tax rates. However, the tax rate was reduced by the realization of tax-free income from the sale of T-Mobile Netherlands and the shares in GlasfaserPlus.

Profit/loss after taxes from discontinued operation

The sale of the GD tower companies was consummated on February 1, 2023, and these companies have not been part of the Group since that date. The development presented contains the contributions for the first month of 2023.

The following table provides a breakdown of profit/loss after taxes from the discontinued operation:

millions of €	H1 2023	H1 2022
Net revenue	15	106
Other operating income	12,923	(2)
Changes in inventories	0	3
Own capitalized costs	0	12
Goods and services purchased	69	379
Personnel costs	(6)	(36)
Other operating expenses	0	(1)
EBITDA	13,001	460
Depreciation, amortization and impairment losses	0	(192)
Profit (loss) from operations (EBIT)	13,001	269
Finance costs	(14)	(13)
Other financial income (expense)	(2)	28
Profit (loss) from financial activities	(16)	15
Profit (loss) before income taxes	12,986	284
Income taxes	706	(91)
Profit (loss) after taxes from discontinued operation	13,691	193

Value contributions by GD tower companies are presented separately in the income statement of the discontinued operation. Since Deutsche Telekom largely continues to use the sold passive network infrastructure after consummation of the transaction effective February 1, 2023, the intragroup eliminations of income and expenses between discontinued and continuing operations are disclosed at the level of the discontinued operation. So, for example, goods and services purchased include eliminations of intragroup onward charging of purchased services of GD tower companies mainly to Telekom Deutschland GmbH. In this way, the net effect is that internal cost allocations are no longer included in Deutsche Telekom's interim consolidated financial statements. Due to continuing contractual relationships, the corresponding expenses for purchased services will also be incurred after the sale of the GD tower companies.

Other operating income of EUR 12.9 billion relates to the deconsolidation gain realized from the loss of control over the GD tower companies. Income from income taxes resulted from deferred tax effects arising in connection with the concluded sale-and-leaseback transaction.

For further information on the discontinued operation, please refer to the section "[Changes in the composition of the Group and other transactions.](#)"

Other disclosures

Notes to the consolidated statement of cash flows

Net cash from operating activities

Net cash from operating activities increased by EUR 0.9 billion year-on-year to EUR 18.9 billion. This positive trend is attributable to sound business development. Lower cash outflows in connection with the integration of Sprint in the United States also had a positive effect. By contrast, the increase in net interest payments of EUR 0.2 billion and the increase in tax payments of EUR 0.2 billion had a reducing effect.

Net cash used in/from investing activities

millions of €	H1 2023	H1 2022
Cash outflows for investments in intangible assets	(2,441)	(4,679)
Cash outflows for investments in property, plant and equipment	(6,995)	(7,579)
Proceeds from the disposal of property, plant and equipment, and intangible assets	57	84
Payments for publicly funded investments in the broadband build-out	(147)	(162)
Proceeds from public funds for investments in the broadband build-out	117	129
Cash outflows for short-term investments in government bonds	(199)	0
Net cash flows for collateral deposited and hedging transactions	(190)	(1,657)
Other changes in cash and cash equivalents in connection with the acquisition of control of subsidiaries and associates	(4)	(52)
Changes in cash and cash equivalents in connection with the sale of the 51 % stake in the GD tower companies ^a	7,598	0
Changes in cash and cash equivalents in connection with the sale of the 75 % stake in T-Mobile Netherlands ^b	0	3,642
Changes in cash and cash equivalents in connection with the sale of the 50 % stake in GlasfaserPlus ^c	0	432
Changes in cash and cash equivalents in connection with the sale of T-Mobile US' fiber-optic-based wireline business ^d	13	0
Other changes in cash and cash equivalents in connection with the loss of control of subsidiaries and associates	13	15
Other	(96)	(320)
Net cash (used in) from investing activities	(2,274)	(10,148)
Of which: from discontinued operation	(17)	(99)

^a Includes, in addition to the cash inflow of EUR 7,695 million for the sale of the 51 % stake, outflows of cash and cash equivalents in the amount of EUR 97 million.

^b Includes, in addition to the cash inflow of EUR 3,671 million for the sale of the 75 % stake, outflows of cash and cash equivalents in the amount of EUR 29 million.

^c Includes, in addition to the cash inflow of EUR 441 million for the sale of the 50 % stake, outflows of cash and cash equivalents in the amount of EUR 9 million.

^d Includes, in addition to the cash inflow of EUR 56 million for the sale of the wireline business, outflows of cash and cash equivalents in the amount of EUR 43 million.

At EUR 9.4 billion, cash outflows for investments in intangible assets and property, plant and equipment were EUR 2.8 billion lower than in the prior year. In the Europe operating segment, mobile spectrum licenses were acquired for a total of EUR 0.2 billion and in the United States operating segment, mobile spectrum licenses were acquired for a total of EUR 0.1 billion in the reporting period. In the prior year, this item had included cash outflows for the acquisition of mobile spectrum licenses of EUR 2.6 billion in the United States operating segment. Excluding investments in mobile spectrum licenses, cash outflows for investments in intangible assets and property, plant and equipment were down EUR 0.5 billion year-on-year. Cash outflows in the United States operating segment decreased by EUR 1.0 billion, in particular due to higher cash outflows for investments in the prior year as a result of the accelerated build-out of the 5G network and the integration of Sprint. By contrast, cash outflows increased by EUR 0.5 billion in the Germany operating segment, mainly in connection with the fiber-optic build-out, and by EUR 0.1 billion in the Europe operating segment.

Net cash used in/from financing activities

millions of €	H1 2023	H1 2022
Issuance of bonds	6,011	0
Repayment of bonds	(4,512)	(1,385)
Commercial paper, net	(2,280)	0
Repayment of EIB loans	(286)	(12)
Overnight borrowings from banks, net	(200)	1
Repayment of liabilities with the right of creditors to priority repayment in the event of default	(329)	(243)
Repayment of liabilities from 5G spectrum acquired in Germany	(85)	(85)
Repayment of financial liabilities for media broadcasting rights	(148)	(171)
Principal portion of repayment of lease liabilities	(3,201)	(2,415)
Changes in cash and cash equivalents in connection with the sale and leaseback of the passive network infrastructure of the GD tower companies	3,069	0
Net cash flows for hedging transactions	38	122
Cash flows from continuing involvement factoring, net	4	13
Dividend payments (including to other shareholders of subsidiaries)	(3,564)	(3,247)
Cash inflows from transactions with non-controlling entities		
T-Mobile US stock options	6	3
Cellnex Netherlands capital contributions	0	16
Other cash inflows	8	5
	14	25
Cash outflows from transactions with non-controlling entities		
Increase of the stake in T-Mobile US	0	(2,210)
T-Mobile US share buy-back/share-based payment	(7,840)	(192)
OTE share buy-back	(59)	(151)
Other payments	(116)	(76)
	(8,015)	(2,629)
Other	(85)	(464)
Net cash (used in) from financing activities	(13,570)	(10,491)
Of which: from discontinued operation	(74)	(140)

Non-cash transactions

In the reporting period, Deutsche Telekom leased assets totaling EUR 4.0 billion, mainly network equipment, cell sites, and land and buildings. As a result, these assets are recognized in the statement of financial position under right-of-use assets and the related liabilities under lease liabilities. Future repayments of the liabilities will be recognized in net cash used in/from financing activities. In the prior-year period, EUR 6.6 billion had related to the modification of the arrangements with Crown Castle, resulting in an increase in the same amount in the carrying amount of the right-of-use assets and the lease liabilities. Excluding this effect, asset leases were up EUR 1.7 billion against the prior-year period, mainly due to the leaseback of passive network infrastructure in Germany and Austria under the sale-and-leaseback agreement in connection with the sale of the GD tower companies. In the United States operating segment, asset leases were down by EUR 0.3 billion year-on-year, mainly due to synergies from the decommissioning of Sprint's old mobile network and the associated lower lease liabilities for network technology.

For further information on the sale of the GD tower companies, please refer to the section ["Changes in the composition of the Group and other transactions."](#)

Consideration for the acquisition of broadcasting rights is paid by Deutsche Telekom in accordance with the terms of the contract on the date of its conclusion or spread over the term of the contract. Financial liabilities of EUR 0.1 billion were recognized in the reporting period for future consideration for acquired broadcasting rights (H1 2022: EUR 0.2 billion). The payment of the consideration will be recognized in net cash used in/from financing activities.

In the United States operating segment, EUR 0.1 billion was recognized for mobile terminal equipment under property, plant and equipment in the reporting period (H1 2022: EUR 0.2 billion). This relates to the terminal equipment lease model at T-Mobile US, under which customers do not purchase the devices but lease them. The cash outflows are presented under net cash from operating activities. The decline was primarily due to the strategic withdrawal from the terminal equipment lease model.

Segment reporting

The following table provides an overview of Deutsche Telekom's operating segments and the Group Headquarters & Group Services segment for the first half of 2023 and the first half of 2022.

For further information, please refer to the section "Development of business in the operating segments" in the interim Group management report.

Effective July 1, 2022, Deutsche Telekom Security GmbH and the **security business** in Germany, Austria, Switzerland, Hungary, and Slovakia were reassigned from the Systems Solutions operating segment to the Germany operating segment. Prior-year comparatives were adjusted retrospectively.

As a result of the agreement concluded on July 13, 2022, the **GD tower companies**, which operated the cell tower business in Germany and Austria in the Group Development operating segment, had been recognized as a discontinued operation in the interim consolidated financial statements from the third quarter of 2022 until their sale effective February 1, 2023. The relevant comparative period in the consolidated income statement was adjusted with retrospective effect.

In response to the IFRS Interpretations Committee's agenda decision published in May 2022 on transactions involving the commercial resale of software, Deutsche Telekom has implemented comprehensive changes to its accounting practices with respect to the recognition of **gross vs. net revenues**, effective the start of the third quarter of 2022. The prior-year comparatives for revenue and goods and services purchased were adjusted accordingly with retrospective effect.

In accordance with the Company's own principles of segment management, when loans with embedded derivatives are granted internally to Group entities, the derivative component is recognized separately also in the creditor company's segment financial statements and measured at fair value through profit or loss.

Segment information in the first half of the year

		Comparative period						Reporting date		
		Net revenue	Inter-segment revenue	Total revenue	Profit (loss) from operations (EBIT)	Depreciation and amortization	Impairment losses	Segment assets ^a	Segment liabilities ^a	Investments accounted for using the equity method ^a
Germany	H1 2023	11,968	322	12,290	2,902	(2,088)	(2)	51,673	37,673	477
	H1 2022	11,707	294	12,001	4,250	(1,991)	(1)	49,366	33,167	511
United States	H1 2023	35,815	2	35,817	7,262	(7,734)	(36)	210,475	143,511	376
	H1 2022	36,315	5	36,320	2,962	(9,576)	(470)	215,581	143,900	368
Europe	H1 2023	5,590	93	5,683	946	(1,248)	(3)	24,430	9,491	52
	H1 2022	5,309	102	5,411	889	(1,230)	(5)	23,449	8,202	36
Systems Solutions	H1 2023	1,588	317	1,905	36	(107)	(11)	4,097	3,163	22
	H1 2022	1,527	342	1,869	2	(112)	(18)	4,087	3,240	23
Group Development	H1 2023	27	79	106	13,011	(1)	0	14,092	4,055	6,407
	H1 2022	678	437	1,115	1,357	(193)	0	6,444	8,572	365
Group Headquarters & Group Services	H1 2023	71	1,059	1,130	(923)	(670)	0	40,990	53,348	15
	H1 2022	96	1,124	1,220	(766)	(715)	(24)	40,522	55,067	15
Total from continuing operations and discontinued operation	H1 2023	55,060	1,873	56,931	23,234	(11,848)	(52)	345,757	251,241	7,349
Reconciliation	H1 2022	55,634	2,302	57,936	8,694	(13,817)	(518)	339,449	252,148	1,318
	H1 2023	0	(1,873)	(1,873)	(12)	1	0	(46,056)	(45,939)	0
Consolidated total from continuing operations and discontinued operation	H1 2022	0	(2,302)	(2,302)	(10)	1	(1)	(40,859)	(40,878)	0
	H1 2023	55,060	0	55,060	23,222	(11,847)	(52)	299,701	205,302	7,349
Discontinued operation	H1 2022	55,634	0	55,634	8,684	(13,816)	(519)	298,590	211,270	1,318
	H1 2023	(15)	(84)	(99)	(13,001)	0	0	n.a.	n.a.	n.a.
Reconciliation	H1 2022	(106)	(464)	(570)	(269)	192	0	n.a.	n.a.	n.a.
	H1 2023	0	84	84	0	0	0	n.a.	n.a.	n.a.
Group total	H1 2022	0	464	464	0	0	0	n.a.	n.a.	n.a.
	H1 2023	55,045	0	55,045	10,221	(11,847)	(52)	299,701	205,302	7,349
	H1 2022	55,528	0	55,528	8,415	(13,625)	(519)	298,590	211,270	1,318

^a Figures relate to the reporting dates of June 30, 2023 and December 31, 2022, respectively.

Contingencies

This section provides additional information and explains recent changes in the contingent liabilities and assets as described in the consolidated financial statements for the 2022 financial year.

Proceedings against T-Mobile US in consequence of the cyberattack on T-Mobile US in August 2021. In the proceedings against T-Mobile US in relation to the cyberattack on T-Mobile US in August 2021, the competent court issued an order on June 29, 2023 granting final approval of the agreement dated July 22, 2022 to settle the federal class action lawsuit. The order has been appealed, leading to a delay in the conclusion of the proceedings.

Other financial obligations

The following table provides an overview of Deutsche Telekom's other financial obligations as of June 30, 2023:

millions of €	
	June 30, 2023
Purchase commitments regarding property, plant and equipment	6,176
Purchase commitments regarding intangible assets	4,903
Firm purchase commitments for inventories	3,126
Other purchase commitments and similar obligations	27,550
Payment obligations to the Civil Service Pension Fund	817
Obligations arising in connection with business combinations	1,076
Miscellaneous other obligations	0
	43,648

Other purchase commitments and similar obligations mainly comprise obligations for the procurement of services, such as maintenance and servicing, IT services, marketing measures, and outsourcing. Of the obligations arising in connection with business combinations, USD 1.0 billion (EUR 0.9 billion) relates to obligations arising from the agreed acquisition of Ka'ena in the United States.

For further information on the agreed acquisition of Ka'ena, please refer to the section "[Changes in the composition of the Group and other transactions.](#)"

Disclosures on financial instruments

Carrying amounts, amounts recognized, and fair values by class and measurement category

millions of €

	Measurement category in accordance with IFRS 9	Amounts recognized in the statement of financial position in accordance with IFRS 9				Amounts recognized in the statement of financial position in accordance with IFRS 16	Fair value June 30, 2023 ^b
		Carrying amount June 30, 2023	Amortized cost	Fair value through other comprehensive income without recycling to profit or loss	Fair value through other comprehensive income with recycling to profit or loss		
Assets							
Cash and cash equivalents	AC	8,742	8,742				
Trade receivables							
At amortized cost	AC	7,039	7,039				
At fair value through other comprehensive income	FVOCI	8,711			8,711		8,711
Other financial assets							
Originated loans and other receivables							
At amortized cost	AC	6,711	6,711				6,721
Of which: collateral paid	AC	1,533	1,533				
Of which: publicly funded projects	AC	2,074	2,074				
At fair value through profit or loss	FVTPL	695			695		695
Equity instruments							
At fair value through other comprehensive income	FVOCI	441		441			441
At fair value through profit or loss	FVTPL	4			4		4
Derivative financial assets							
Derivatives without a hedging relationship	FVTPL	1,131			1,131		1,131
Of which: termination rights embedded in bonds issued	FVTPL	206			206		206
Of which: energy forward agreements embedded in contracts	FVTPL	140			140		140
Of which: options received from third parties for the purchase or sale of shares in subsidiaries and associates	FVTPL	362			362		362
Derivatives with a hedging relationship	n.a.	1,043			1,043		1,043
Lease assets	n.a.	182				182	
Cash and cash equivalents and trade receivables and other financial assets directly associated with non-current assets and disposal groups held for sale	AC	0	0				
Liabilities							
Trade payables	AC	10,384	10,384				
Bonds and other securitized liabilities	AC	91,822	91,822				87,146
Liabilities to banks	AC	3,610	3,610				3,435
Liabilities with the right of creditors to priority repayment in the event of default	AC	2,533	2,533				2,432
Other interest-bearing liabilities	AC	7,149	7,149				6,955
Of which: collateral received	AC	85	85				
Liabilities from deferred interest	AC	1,036	1,036				
Other non-interest-bearing liabilities	AC	1,006	1,006				
Of which: puttable shares of non-controlling interests in consolidated partnerships	AC	19	19				
Lease liabilities	n.a.	41,999				41,999	

^a For energy forward agreements embedded in contracts please refer to the detailed comments in the following section.

^b The practical expedients under IFRS 7.29 were applied for disclosures on specific fair values.

millions of €

Amounts recognized in the statement of financial position in accordance with IFRS 9

	Measurement category in accordance with IFRS 9	Carrying amount June 30, 2023	Amortized cost	Fair value through other comprehensive income without recycling to profit or loss	Fair value through other comprehensive income with recycling to profit or loss	Fair value through profit or loss ^a	Amounts recognized in the statement of financial position in accordance with IFRS 16	Fair value June 30, 2023 ^b
Derivative financial liabilities								
Derivatives without a hedging relationship	FVTPL	379				379		379
Of which: energy forward agreements embedded in contracts	FVTPL	34				34		34
Derivatives with a hedging relationship	n.a.	2,446			92	2,354		2,446
Of which: energy forward agreements	n.a.	29			29			29
Trade payables and other financial liabilities directly associated with non-current assets and disposal groups held for sale								
	AC	0	0					
Of which: aggregated by measurement category in accordance with IFRS 9								
Assets								
Financial assets at amortized cost	AC	22,492	22,492					6,721
Financial assets at fair value through other comprehensive income with recycling to profit or loss	FVOCI	8,711			8,711			8,711
Financial assets at fair value through other comprehensive income without recycling to profit or loss	FVOCI	441		441				441
Financial assets at fair value through profit or loss	FVTPL	1,830				1,830		1,830
Liabilities								
Financial liabilities at amortized cost	AC	117,540	117,540					99,968
Financial liabilities at fair value through profit or loss	FVTPL	379				379		379

^a For energy forward agreements embedded in contracts please refer to the detailed comments in the following section.

^b The practical expedients under IFRS 7.29 were applied for disclosures on specific fair values.

Carrying amounts, amounts recognized, and fair values by class and measurement category

millions of €

	Measurement category in accordance with IFRS 9	Carrying amount Dec. 31, 2022	Amounts recognized in the statement of financial position in accordance with IFRS 9			Amounts recognized in the statement of financial position in accordance with IFRS 16	Fair value Dec. 31, 2022 ^b
			Amortized cost	Fair value through other comprehensive income without recycling to profit or loss	Fair value through other comprehensive income with recycling to profit or loss		
Assets							
Cash and cash equivalents	AC	5,767	5,767				
Trade receivables							
At amortized cost	AC	6,926	6,926				
At fair value through other comprehensive income	FVOCI	9,841		9,841			9,841
Other financial assets							
Originated loans and other receivables							
At amortized cost	AC	6,337	6,337				6,347
Of which: collateral paid	AC	1,484	1,484				
Of which: publicly funded projects	AC	2,019	2,019				
At fair value through profit or loss	FVTPL	646			646		646
Equity instruments							
At fair value through other comprehensive income	FVOCI	446		446			446
At fair value through profit or loss	FVTPL	3			3		3
Derivative financial assets							
Derivatives without a hedging relationship	FVTPL	1,239			1,239		1,239
Of which: termination rights embedded in bonds issued	FVTPL	117			117		117
Of which: energy forward agreements embedded in contracts	FVTPL	204			204		204
Of which: options received from third parties for the purchase or sale of shares in subsidiaries and associates	FVTPL	402			402		402
Derivatives with a hedging relationship	n.a.	1,034			1,034	0	1,034
Lease assets	n.a.	205					205
Cash and cash equivalents and trade receivables and other financial assets directly associated with non-current assets and disposal groups held for sale	AC	75	75				
Liabilities							
Trade payables	AC	12,035	12,035				
Bonds and other securitized liabilities	AC	93,103	93,103				86,943
Liabilities to banks	AC	4,122	4,122				3,926
Liabilities with the right of creditors to priority repayment in the event of default	AC	3,623	3,623				3,498
Other interest-bearing liabilities	AC	7,526	7,526				7,311
Of which: collateral received	AC	156	156				
Liabilities from deferred interest	AC	999	999				
Other non-interest-bearing liabilities	AC	769	769				
Of which: puttable shares of non-controlling interests in consolidated partnerships	AC	13	13				
Lease liabilities	n.a.	38,792					38,792
Derivative financial liabilities							
Derivatives without a hedging relationship	FVTPL	368			368		368
Of which: energy forward agreements embedded in contracts	FVTPL	59			59		59
Derivatives with a hedging relationship	n.a.	2,521			44	2,477	2,521
Of which: energy forward agreements	n.a.	0			0		0

^a For energy forward agreements embedded in contracts please refer to the detailed comments in the following section.

^b The practical expedients under IFRS 7.29 were applied for disclosures on specific fair values.

millions of €

	Measurement category in accordance with IFRS 9	Carrying amount Dec. 31, 2022	Amounts recognized in the statement of financial position in accordance with IFRS 9			Amounts recognized in the statement of financial position in accordance with IFRS 16	Fair value Dec. 31, 2022 ^b
			Amortized cost	Fair value through other comprehensive income without recycling to profit or loss	Fair value through other comprehensive income with recycling to profit or loss		
Trade payables and other financial liabilities directly associated with non-current assets and disposal groups held for sale	AC	2,431	2,431				
Of which: aggregated by measurement category in accordance with IFRS 9							
Assets							
Financial assets at amortized cost	AC	19,105	19,105			6,347	
Financial assets at fair value through other comprehensive income with recycling to profit or loss	FVOCI	9,841		9,841		9,841	
Financial assets at fair value through other comprehensive income without recycling to profit or loss	FVOCI	446		446		446	
Financial assets at fair value through profit or loss	FVTPL	1,888			1,888	1,888	
Liabilities							
Financial liabilities at amortized cost	AC	124,608	124,608			101,678	
Financial liabilities at fair value through profit or loss	FVTPL	368			368	368	

^a For energy forward agreements embedded in contracts please refer to the detailed comments in the following section.

^b The practical expedients under IFRS 7.29 were applied for disclosures on specific fair values.

Trade receivables include receivables amounting to EUR 2.2 billion (December 31, 2022: EUR 2.8 billion) due in more than one year. The fair value generally equals the carrying amount.

Disclosures on fair value

When determining the fair value, it is important to maximize the use of current inputs observable in liquid markets for the financial instrument in question and minimize the use of other inputs (e.g., historical prices, prices for similar instruments, prices on illiquid markets). A three-level measurement hierarchy is defined for these purposes. If prices quoted in liquid markets are available at the reporting date for the respective financial instrument, these will be used unadjusted for the measurement (Level 1 measurement). Other input parameters are then irrelevant for the measurement. One such example is shares and bonds that are actively traded on a stock exchange. If quoted prices on liquid markets are not available at the reporting date for the respective financial instrument, but the instrument can be measured using other inputs that are observable on the market at the reporting date, a Level 2 measurement will be applied. The conditions for this are that no major adjustments have been made to the observable inputs and no unobservable inputs are used. Examples of Level 2 measurements are collateralized interest rate swaps, currency forwards, and cross-currency swaps that can be measured using current interest rates or exchange rates. If the conditions for a Level 1 or Level 2 measurement are not met, a Level 3 measurement is applied. In such cases, major adjustments must be made to observable inputs or unobservable inputs must be used.

Financial instruments measured at fair value

millions of €

	June 30, 2023				Dec. 31, 2022			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets								
Trade receivables								
At fair value through other comprehensive income			8,711	8,711			9,841	9,841
At fair value through profit or loss			0	0			0	0
Other financial assets – Originated loans and other receivables								
At fair value through profit or loss	234	0	461	695	206	0	440	646
Equity instruments								
At fair value through other comprehensive income	9		432	441	9		437	446
At fair value through profit or loss			4	4			3	3
Derivative financial assets								
Derivatives without a hedging relationship		753	378	1,131		884	355	1,239
Derivatives with a hedging relationship		1,043		1,043		1,034		1,034
Liabilities								
Derivative financial liabilities								
Derivatives without a hedging relationship		345	34	379		309	59	368
Derivatives with a hedging relationship		2,417	29	2,446		2,521		2,521

Of the equity instruments measured at fair value through other comprehensive income and recognized under other financial assets, the instruments presented in the different levels constitute separate classes of financial instruments. In each case, the fair values of the total volume of equity instruments recognized as Level 1 are the price quotations at the reporting date.

The listed bonds and other securitized liabilities are assigned to Level 1 or Level 2 depending on the market liquidity of the relevant instrument. Consequently, issues denominated in euros or U.S. dollars with relatively large nominal amounts are to be classified as Level 1, the rest as Level 2. The fair values of the instruments assigned to Level 1 equal the nominal amounts multiplied by the price quotations at the reporting date. The fair values of the instruments assigned to Level 2 are calculated as the present values of the payments associated with the debts, based on the applicable yield curve and Deutsche Telekom's credit spread curve for specific currencies.

The fair values of liabilities to banks and other interest-bearing liabilities are calculated as the present values of the payments associated with the debts, based on the applicable yield curve and Deutsche Telekom's credit spread curve for specific currencies. The fair values of trade receivables and of originated loans and other receivables are calculated as the present values of the payments associated with the receivables, based on the applicable yield curve and the credit risk of the debtors.

Since there are no market prices available for the derivative financial instruments in the portfolio assigned to Level 2 due to the fact that they are not listed on the market, the fair values are calculated using standard financial valuation models, based entirely on observable inputs. The fair value of derivatives is the price that Deutsche Telekom would receive or have to pay if the financial instrument were transferred at the reporting date. Interest rates of contractual partners relevant as of the reporting date are used in this respect. The middle rates applicable as of the reporting date are used as exchange rates. In the case of interest-bearing derivatives, a distinction is made between the clean price and the dirty price. In contrast to the clean price, the dirty price also includes the interest accrued. The fair values carried correspond to the full fair value or the dirty price.

The equity instruments measured at fair value through other comprehensive income comprise a large number of investments in strategic, unlisted individual positions. Deutsche Telekom considers the chosen measurement through other comprehensive income without recycling to profit or loss to be appropriate because there are no plans to use the investments for short-term profit-taking. At the date of disposal of an investment, the total cumulative gain or loss is reclassified to retained earnings. Acquisitions and disposals are based on business policy investment decisions.

Development of the carrying amounts of the financial assets and financial liabilities assigned to Level 3

millions of €

	Equity instruments at fair value through other comprehensive income	Derivative financial assets at fair value through profit or loss: termination rights embedded in bonds issued	Derivative financial assets at fair value through profit or loss: energy forward agreements	Derivative financial liabilities at fair value through profit or loss: energy forward agreements	Originated loans and other receivables at fair value through profit or loss: contingent consideration receivable
Carrying amount as of January 1, 2023	436	117	204	(59)	415
Additions (including first-time classification as Level 3)	31	16	0	0	0
Decreases in fair value recognized in profit/loss (including losses on disposal)		(30)	(57)	(25)	0
Increases in fair value recognized in profit/loss (including gains on disposal)		106	1	45	8
Decreases in fair value recognized directly in equity	(62)				
Increases in fair value recognized directly in equity	41				
Disposals (including last classification as Level 3) ^a	(14)	0	(5)	5	0
Currency translation effects recognized directly in equity	(1)	(3)	(3)	0	0
Carrying amount as of June 30, 2023	431	206	140	(34)	423

^a The disposals under energy forward agreements include billing amounts paid.

The equity instruments assigned to Level 3 that are measured at fair value through other comprehensive income and carried under other financial assets are equity investments with a carrying amount of EUR 431 million measured using the best information available at the reporting date. As a rule, Deutsche Telekom considers transactions involving shares in those companies to have the greatest relevance. Transactions involving shares in comparable companies are also considered. The proximity of the relevant transaction to the reporting date, and the question of whether it was conducted at arm's length, are relevant for deciding which information is used for the measurement. Furthermore, the degree of similarity between the object being measured and comparable companies must be taken into consideration. Based on Deutsche Telekom's own assessment, the fair values of the equity investments at the reporting date could be determined with sufficient reliability. For the development of the carrying amounts in the reporting period, please refer to the table above. At the reporting date, no investments were held for sale. In the case of investments with a carrying amount of EUR 79 million, transactions involving shares in these companies took place at arm's length sufficiently close to the reporting date, which is why the share prices agreed in the transactions were to be used without adjustment for the measurement as of the current reporting date. In the case of investments with a carrying amount of EUR 15 million, an analysis of operational indicators (especially revenue, EBIT, and liquidity) revealed that the carrying amounts were equivalent to current fair values. Due to better comparability, previous arm's length transactions involving shares in these companies are preferable to more recent transactions involving shares in similar companies. In the case of investments with a carrying amount of EUR 277 million, for which the last arm's length transactions relating to shares in these companies took place further in the past, a measurement performed more recently relating to shares in similar companies provides the most reliable representation of the fair values. Here, multiples to the reference variable of expected revenue (ranging between 3 and 12.4) were applied and a range of equally distributed percentiles in intervals of 16.7 % around the median were taken as a basis. For each investment, the appropriate percentile was used depending on the specific circumstances. If other values had been used for the multiples and for the expected revenue amounts, the calculated fair values would have been different. These hypothetical deviations (sensitivities) are shown in the table below. In addition, non-material individual items with a carrying amount of EUR 60 million when translated into euros are included with differences in value of minor relevance.

The derivatives without a hedging relationship assigned to Level 3 and carried under derivative financial assets relate to options embedded in bonds issued by T-Mobile US with a carrying amount of EUR 206 million when translated into euros. The options, which can be exercised by T-Mobile US at any time, allow early redemption of the bonds at fixed exercise prices. Observable market prices are available regularly and also at the reporting date for the bonds as entire instruments, but not for the options embedded therein. The termination rights are measured using an option pricing model. Historical interest rate volatilities of bonds issued by T-Mobile US and comparable issuers are used for the measurement because these provide a more reliable estimate at the reporting date than current market interest rate volatilities. The spread curve, which is also unobservable, was derived on the basis of current market prices of bonds issued by T-Mobile US and debt instruments of comparable issuers. Risk-free interest rates and spreads were simulated separately from each other. At the current reporting date, the following interest rate volatility and spreads were used for the various rating levels of the bonds:

Interest rate volatilities and spreads used by rating levels

%	Interest volatility (absolute figure)	Spread
BBB+	0.1 – 0.2	1.4 – 1.9
BBB-	0.1 – 0.2	1.7 – 2.2
BB+	0.1 – 0.2	1.9 – 2.4

For the mean reversion input, which is unobservable, 3 % was used. In our opinion, the values used constitute the best estimate in each case. If other values had been used for interest rate volatility, spread curve, or mean reversion, the calculated fair values would have been different. These hypothetical deviations (sensitivities) are shown in the table below. If the risk-free interest rate had been 50 basis points higher (lower) at the reporting date, the fair value of the options would have been EUR 65 million lower (EUR 83 million higher). In the reporting period, net income of EUR 76 million when translated into euros was recognized under the Level 3 measurement in other financial income/expense for unrealized gains for the options in the portfolio at the reporting date. In the reporting period, no option was exercised. Please refer to the table above for the development of the carrying amounts in the reporting period. The changes in value recognized in profit or loss in the reporting period were mainly attributable to fluctuations in the interest rates and historical interest rate volatilities in absolute terms that are relevant for measurement. Due to their distinctiveness, these instruments constitute a separate class of financial instruments.

Sensitivities^a of the carrying amounts of the financial assets and financial liabilities assigned to Level 3 depending on unobservable inputs

millions of €	Equity instruments at fair value through other comprehensive income	Derivative financial assets at fair value through profit or loss: termination rights embedded in bonds issued	Derivative financial assets at fair value through profit or loss: energy forward agreements	Derivative financial liabilities at fair value through profit or loss: energy forward agreements	Originated loans and other receivables at fair value through profit or loss: contingent consideration receivable
Multiple next-level-up quantile	84				
Multiple next-level-down quantile	(53)				
Expected revenues +10 %	24				
Expected revenues -10 %	(24)				
Interest rate volatility ^b +10 %		14			
Interest rate volatility ^b -10 %		(16)			
Spread curve ^c +50 basis points		(83)			(8)
Spread curve ^c -50 basis points		116			8
Mean reversion ^d +100 basis points		(11)			
Mean reversion ^d -100 basis points		12			
Future energy prices +10 %			35	8	
Future energy prices -10 %			(43)	(9)	
Future energy output +5 %			23	2	
Future energy output -5 %			(30)	(3)	
Future prices for renewable energy credits ^e +100 %			9	17	
Future prices for renewable energy credits ^e from zero			(17)	(17)	
Planned fiber-optic build-out is completed one year earlier than expected					17
Planned fiber-optic build-out is completed one year later than expected					(16)
Actual fiber-optic build-out is 5 % higher than planned each year					42
Actual fiber-optic build-out is 5 % lower than planned each year					(42)

^a Change in the relevant input parameter assuming all other input parameters are unchanged.

^b Interest rate volatility shows the magnitude of fluctuations in interest rates over time (relative change). The larger the fluctuations, the higher the interest rate volatility.

^c The spread curve shows, for the respective maturities, the difference between the interest rates payable by the debtor and the risk-free interest rates. A minimum of zero was set for the spread curve for the sensitivity calculation, i.e., negative spreads are not applicable.

^d Mean reversion describes the assumption that, after a change, an interest rate will revert to its average over time. The higher the selected value (mean reversion speed), the faster the interest rate will revert to its average in the measurement model.

^e Renewable energy credits is the term used for U.S. emission certificates.

With a carrying amount of EUR 140 million when translated into euros, the derivatives without a hedging relationship assigned to Level 3 and carried under derivative financial assets relate to energy forward agreements embedded in contracts entered into by T-Mobile US. The same applies to derivative financial liabilities with a carrying amount of EUR 34 million when translated into euros. These agreements consist of two components: the energy forward agreement and the acquisition of renewable energy credits by T-Mobile US. In the case of one energy forward agreement, commercial operation is set to begin in 2025; with the others, it has already begun. Under the energy forward agreements, which are accounted for separately as derivatives, T-Mobile US receives variable amounts based on the actual energy output and the then current energy prices, and pays fixed amounts per unit of energy generated from the start of commercial operations throughout the term of the contract. The energy forward agreements are measured using valuation models because no observable market prices are available. The value of the derivatives is significantly influenced by the future energy output, the future energy prices on the relevant markets, and the future prices of renewable energy credits. The main contract parameters, including the assumptions made for unobservable parameters and periods, are set out in the following table. In our opinion, these assumptions made constitute the best estimate in each case. In the view of T-Mobile US, the contracts were entered into at current market conditions, and the most appropriate parameters for the unobservable inputs were used for measurement purposes. The transaction price at inception was zero in each case. Since the unobservable inputs have a significant influence on the measurement of the derivatives, the respective amount resulting from initial measurement (day 1 gain) – with the exception of the agreements concluded by Sprint that are explained below – was not recognized in profit or loss on initial recognition. Instead, these day 1 gains are amortized in profit or loss on a straight-line basis over the period of commercial energy production. This amortization adjusts the effects from measuring the derivatives in each accounting period using the respective valuation models and updated parameters. All amounts from the measurement of the derivatives are presented in net terms per contract in the statement of financial position (derivative financial assets/liabilities) and in the income statement (other operating income/expenses). Sprint also has agreements of this kind in its portfolio. These were concluded before the business combination with T-Mobile US and, for these agreements too, unobservable inputs have a material influence on the measurement of the derivatives. However, under the requirements for business combinations, the respective amounts resulting from the measurement are recognized as derivative financial assets, as a result of which there are no amounts yet to be amortized for these agreements. On the following reporting dates, the effects from the periodic measurement of the derivatives will be recorded in full in the income statement (other operating expenses or other operating income). At the reporting date, the calculated fair value from Deutsche Telekom's perspective for one of the energy forward agreements described above is negative and amounts to EUR -8 million when translated into euros. All the rest are positive and amount to EUR 239 million when translated into euros. If other values had been used for future energy prices, future energy output, or future prices of renewable energy credits, the calculated fair values would have been different. These hypothetical deviations (sensitivities) are shown in the table above. In the reporting period, a net expense of EUR 21 million when translated into euros was recognized under the Level 3 measurement in other operating income/expense for unrealized losses for the derivatives for all the above energy forward agreements. Please refer to the corresponding table for the development of the carrying amounts in the reporting period. The market-price changes in the reporting period were attributable in part to changes in observable and unobservable energy prices and to interest rate effects. On the other hand, contract adjustments gave rise to income of EUR 33 million. The development of the day 1 gain yet to be amortized in the income statement in the reporting period is shown in the following table. The straight-line amortization of the day 1 gains through profit or loss over the period of commercial energy production amounts to a total of EUR 11 million per year when translated into euros. In addition, similar energy forward agreements were concluded in Europe for which, however, no significant volatility in fair value is to be expected. At the reporting date, their carrying amount when translated into euros was EUR 29 million (liability), and they were designated as hedging instruments in hedge relationships. Due to their distinctiveness, the energy forward agreements constitute a separate class of financial instruments.

	United States
Term of the contract from the start of commercial operation in years	12 to 15
End of the term of contracts for which commercial operation has already begun	2029 to 2035
Expected energy output in GWh per year	4,057
Expected energy prices per MWh for the unobservable portion of the term in €	
On-peak (i.e., times of relatively high energy demand) in €	25 to 103
Off-peak (i.e., times of relatively low energy demand) in €	18 to 118
On-peak/off-peak ratio	52 %
Length of time in years, for which energy prices are regularly observable	up to 10
Length of time in years, for which the prices of renewable energy credits are regularly observable	around 3

Development of the not yet amortized amounts

millions of €	
	Energy forward agreements ^a
Measurement amounts on initial recognition	173
Measurement amounts on initial recognition (additions during the reporting period)	72
Measurement amounts amortized in profit or loss in prior periods	(40)
Measurement amounts amortized in profit or loss in the current reporting period	(4)
Currency translation adjustments	8
Disposals in prior periods	0
Disposals in the current reporting period	(85)
Measurement amounts not amortized as of June 30, 2023	124

^a For more details, please refer to the explanations above.

The financial assets assigned to Level 3 (originated loans and other receivables) include the contingent consideration receivable from the sale of a 50 % stake in GlasfaserPlus with a carrying amount of EUR 423 million, which arises in stages upon achieving certain fiber-optic build-out milestones and is measured at fair value through profit or loss. Deutsche Telekom measures this receivable on the basis of GlasfaserPlus' current build-out plans. At the current reporting date, it can be assumed that payments will fall due from 2025 to 2029. The spread of the debtor IFM constitutes an unobservable input; at the current reporting date, values of between 1.1 % and 1.5 % were used for the discounting of the individual payments. In our opinion, the assumptions used constitute the best estimate in each case. If other assumptions had been used for the amount and due dates of the payments and for the spread, the calculated fair value would have been different. These hypothetical deviations (sensitivities) are shown in the table above. In the reporting period, net income of EUR 8 million was recognized under the Level 3 measurement of the receivable in other operating income/expense for unrealized discounting effects. Please refer to the table above for the development of the carrying amounts in the reporting period. The market-price change in the reporting period is largely attributable to a change in the interest rates that are relevant for measurement. Due to its distinctiveness, this instrument constitutes a separate class of financial instruments. The other financial assets assigned to Level 3 (originated loans and other receivables) with a carrying amount of EUR 38 million relate to immaterial items for which no significant volatility in fair value is to be expected.

For the trade receivables measured at fair value through other comprehensive income assigned to Level 3 and for the originated loans and other receivables measured at fair value through profit or loss, the main factor in determining fair value is the credit risk of the relevant counterparties. If the default rates applied as of the reporting date had been 1 % higher (lower) with no change in the reference variables, the fair values of the instruments would have been 1 % lower (higher). The financial assets assigned to Level 3 include trade receivables measured at fair value through other comprehensive income, for which the credit risk of customers constitutes an unobservable input for the measurement, with a carrying amount of EUR 8,711 million (December 31, 2022: EUR 9,841 million) when translated into euros. As a rule, a credit scoring model is used for receivables paid in installments. The cash flows are discounted on the basis of the weighted average of the original effective interest rates of the financial assets in the relevant portfolio. A weighted average credit-risk spread of 7.13 % (December 31, 2022: 6.28 %) was applied to the respective receivables portfolios at the reporting date. The credit-risk spreads applied are derived from the expected future credit loss of the relevant portfolio and are updated on an ongoing basis. Changes in the fair value of these trade receivables are caused mainly by changes in observable Level 2 inputs (in particular market interest rates).

The financial assets measured at fair value through profit or loss and assigned to Level 3 include additional options acquired from third parties for the purchase of company shares, with a carrying amount of EUR 32 million. No notable fluctuations in value are expected from these individual items. Due to their distinctiveness, these instruments constitute a separate class of financial instruments.

Disclosures on credit risk

In line with the contractual provisions, in the event of insolvency, all derivatives with a positive or negative fair value that exist with the respective counterparty are offset against each other, leaving a net receivable or liability. The net amounts are normally recalculated every bank working day and offset against each other. When the netting of the positive and negative fair values of all derivatives was positive from Deutsche Telekom's perspective, Deutsche Telekom received unrestricted cash collateral from counterparties pursuant to collateral agreements in the amount of EUR 85 million (December 31, 2022: EUR 156 million). The credit risk was thus reduced by EUR 85 million (December 31, 2022: EUR 134 million) because, on the reporting date, the cash collateral received was offset by corresponding net derivative positions in the same amount. On the basis of these contracts, derivatives with a positive fair value and a total carrying amount of EUR 1,465 million as of the reporting date (December 31, 2022: EUR 1,549 million) had a residual credit risk of EUR 22 million as of June 30, 2023 (December 31, 2022: EUR 0.6 million).

When the netting of the positive and negative fair values of all derivatives was negative from Deutsche Telekom's perspective, Deutsche Telekom provided cash collateral in the amount of EUR 1,462 million as of the reporting date (December 31, 2022: EUR 1,411 million) to counterparties pursuant to collateral agreements. The cash collateral paid is offset by corresponding net derivative positions of EUR 1,393 million at the reporting date (December 31, 2022: EUR 1,392 million), which is why it was not exposed to any credit risks in this amount.

On account of its close connection to the corresponding derivatives, the collateral received (paid) constitutes a separate class of financial liabilities (assets). There were no other significant agreements reducing the maximum exposure to the credit risk of financial assets. The maximum exposure to credit risk of the other financial assets thus corresponds to their carrying amounts.

In accordance with the terms of the bonds issued by T-Mobile US, T-Mobile US has the right to terminate the majority of bonds prematurely under specific conditions. The rights of early termination constitute embedded derivatives and are presented separately as derivative financial assets in the consolidated statement of financial position. Since they are not exposed to any credit risk, they constitute a separate class of financial instruments. Please refer to the explanations above for more information on the energy forward agreements for which no material collateral is provided. There is also no credit risk on embedded derivatives held. No collateral is provided for the options acquired from third parties for shares in a subsidiary of Deutsche Telekom or shares in other companies (see explanations above).

In connection with auctions for the acquisition of spectrum licenses, subsidiaries of Deutsche Telekom have not deposited any cash collateral as of the reporting date (December 31, 2022: EUR 2 million). At the reporting date, cash and cash equivalents of EUR 68 million (December 31, 2022: EUR 63 million) when translated into euros were pledged as cash collateral for liabilities issued by Sprint with the right of creditors to priority repayment in the event of default. This cash collateral is not exposed to any significant credit risk.

Related-party disclosures

The following significant changes to the related-party disclosures reported in the consolidated financial statements as of December 31, 2022 were in effect as of June 30, 2023:

Joint ventures. On February 1, 2023, Deutsche Telekom transferred 51.0 % of the shares in the cell tower business companies in Germany and Austria (GD tower companies). Since then, the stake retained by Deutsche Telekom of 49.0 % has been included in the consolidated financial statements as a joint venture using the equity method. The carrying amount of the investment amounted to EUR 6.1 billion as of June 30, 2023. Once the transaction was consummated, Deutsche Telekom leased back the majority of the sold passive network infrastructure in Germany and Austria under a sale-and-leaseback agreement with a non-cancellable basic lease term of eight years. As of June 30, 2023, there were lease liabilities to the GD tower companies of EUR 4.9 billion.

For further information on the sale of the GD tower companies, please refer to the section "[Changes in the composition of the Group and other transactions.](#)"

Executive bodies

Board of Management

By resolution of February 23, 2022, Adel Al-Saleh was reappointed as the Board member responsible for T-Systems for the period from January 1, 2023 to December 31, 2027. Furthermore, in the meeting on May 19, 2022, Dr. Christian P. Illek was reappointed as the Board member responsible for Finance from April 1, 2023 to March 31, 2028.

Supervisory Board

Shareholders' representatives. The term of office of Dr. Günther Bräunig, Harald Krüger, and Margret Suckale expired at the end of the shareholders' meeting on April 5, 2023. Harald Krüger and Margret Suckale were reelected to the Supervisory Board by the shareholders' meeting of April 5, 2023. Furthermore, the shareholders' meeting of April 5, 2023 elected Dr. Reinhard Ploss to the Supervisory Board; he succeeds Dr. Günther Bräunig, who left the Supervisory Board.

Employees' representatives. The term of office of all employee representatives on the Supervisory Board expired at the end of the shareholders' meeting on April 5, 2023. At the request of the Board of Management, the existing employee representatives Odysseus D. Chatzidis, Constantin Greve, Nicole Koch, Petra Steffi Kreusel, Kerstin Marx, Frank Sauerland, Susanne Schöttke, Lothar Schröder, Nicole Seelemann-Wandtke, and Karin Topel were reappointed as employee representatives on the Supervisory Board by order of the Bonn District Court dated April 3, 2023 with effect from the end of the shareholders' meeting on April 5, 2023.

Events after the reporting period

T-Mobile US share buy-back program continued. In the period from July 1, 2023 to July 21, 2023, T-Mobile US bought back around 4.0 million additional shares with a total volume of USD 0.6 billion (EUR 0.5 billion) under the share buy-back program.

For further information on the share buy-back program at T-Mobile US, please refer to the section "[Other transactions that had no effect on the composition of the Group.](#)"

T-Mobile US short-term commercial paper program. On July 25, 2023, T-Mobile US established an unsecured short-term commercial paper program with the ability to borrow up to USD 2.0 billion from time to time.

Responsibility statement

To the best of our knowledge, and in accordance with the applicable reporting principles for interim financial reporting, the interim consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the interim Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the material opportunities and risks associated with the expected development of the Group for the remaining months of the financial year.

Bonn, August 10, 2023

Deutsche Telekom AG
The Board of Management

Timotheus Höttges

Adel Al-Saleh

Birgit Bohle

Srini Gopalan

Dr. Christian P. Illek

Thorsten Langheim

Dominique Leroy

Claudia Nemat

Review report

To Deutsche Telekom AG, Bonn

We have reviewed the condensed consolidated interim financial statements – comprising the statement of financial position, the income statement, the statement of comprehensive income, the statement of changes in equity, the statement of cash flows, and selected explanatory notes – and the interim Group management report of Deutsche Telekom AG, Bonn, for the period from January 1 to June 30, 2023 which are part of the half-year financial report pursuant to § (Article) 115 of the German Securities Trading Act (Wertpapierhandelsgesetz – WpHG). The preparation of the condensed consolidated interim financial statements in accordance with the International Financial Reporting Standards (IFRS) applicable to interim financial reporting as adopted by the EU and of the interim Group management report in accordance with the provisions of the German Securities Trading Act applicable to interim Group management reports is the responsibility of the parent company's board of management. Our responsibility is to issue a review report on the condensed consolidated interim financial statements and on the interim Group management report based on our review.

We conducted our review of the condensed consolidated interim financial statements and the interim Group management report in accordance with German generally accepted standards for the review of financial statements promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW) and additionally observed International Standard on Review Engagements 2410 "Review of Interim Financial Information Performed by the Independent Auditor of the Entity." Those standards require that we plan and perform the review so that we can preclude through critical evaluation, with moderate assurance, that the condensed consolidated interim financial statements have not been prepared, in all material respects, in accordance with the IFRS applicable to interim financial reporting as adopted by the EU or that the interim Group management report has not been prepared, in all material respects, in accordance with the provisions of the German Securities Trading Act applicable to interim Group management reports. A review is limited primarily to inquiries of company personnel and analytical procedures and therefore does not provide the assurance attainable in a financial statement audit. Since, in accordance with our engagement, we have not performed a financial statement audit, we cannot express an audit opinion.

Based on our review, no matters have come to our attention that cause us to presume that the condensed interim consolidated financial statements of Deutsche Telekom AG have not been prepared, in all material respects, in accordance with the IFRSs applicable to interim financial reporting as adopted by the EU nor that the interim Group management report has not been prepared, in all material respects, in accordance with the provisions of the German Securities Trading Act applicable to interim group management reports.

Düsseldorf, August 10, 2023

Deloitte GmbH
Wirtschaftsprüfungsgesellschaft

Christoph Schenk
Wirtschaftsprüfer
(German Public Auditor)

Dr. Tim Hoffmann
Wirtschaftsprüfer
(German Public Auditor)

Additional information

Reconciliation for the change in disclosure of key figures for the prior-year period

millions of €

	Total revenue	Profit (loss) from operations (EBIT)	EBITDA AL (adjusted for special factors)	Depreciation and amortization	Impairment losses	Segment assets	Segment liabilities
H1 2022/June 30, 2022							
Presentation as of June 30, 2022 – as reported							
Germany	12,059	4,246	4,815	(1,990)	(1)	49,420	33,151
United States	36,673	2,962	12,509	(9,576)	(470)	219,882	145,823
Europe	5,451	889	1,961	(1,230)	(5)	23,609	8,719
Systems Solutions	2,001	6	155	(113)	(19)	4,084	3,324
Group Development	1,115	1,357	519	(193)	0	6,115	4,092
Group Headquarters & Group Services	1,220	(766)	(185)	(715)	(24)	37,151	56,373
Total	58,519	8,694	19,774	(13,817)	(519)	340,261	251,482
Reconciliation	(2,329)	(10)	(11)	1	0	(38,575)	(38,288)
Group	56,191	8,684	19,763	(13,816)	(519)	301,686	213,194
H1 2022/June 30, 2022							
+/- reassignment of the security business as of July 1, 2022							
Germany	91	4	8	(1)	0	130	104
United States	0	0	0	0	0	0	0
Europe	0	0	0	0	0	0	0
Systems Solutions	(109)	(4)	(8)	1	0	(128)	(101)
Group Development	0	0	0	0	0	0	0
Group Headquarters & Group Services	0	0	0	0	0	0	0
Total	(18)	0	0	0	0	2	3
Reconciliation	19	0	0	0	0	(1)	(3)
Group	0	0	0	0	0	0	0
H1 2022/June 30, 2022							
+/- change in principal/agent disclosure as of July 1, 2022							
Germany	(149)	0	0	0	0	0	0
United States	(353)	0	0	0	0	0	0
Europe	(40)	0	0	0	0	0	0
Systems Solutions	(23)	0	0	0	0	0	0
Group Development	0	0	0	0	0	0	0
Group Headquarters & Group Services	0	0	0	0	0	0	0
Total	(565)	0	0	0	0	0	0
Reconciliation	8	0	0	0	0	0	0
Group	(557)	0	0	0	0	0	0
H1 2022/June 30, 2022							
= presentation following change in disclosure (management approach)^a							
Germany	12,001	4,250	4,823	(1,991)	(1)	49,550	33,255
United States	36,320	2,962	12,509	(9,576)	(470)	219,882	145,823
Europe	5,411	889	1,961	(1,230)	(5)	23,609	8,719
Systems Solutions	1,869	2	147	(112)	(18)	3,956	3,223
Group Development	1,115	1,357	519	(193)	0	6,115	4,092
Group Headquarters & Group Services	1,220	(766)	(185)	(715)	(24)	37,151	56,373
Total	57,936	8,694	19,774	(13,817)	(518)	340,263	251,485
Reconciliation	(2,302)	(10)	(11)	1	(1)	(38,576)	(38,291)
Group	55,634	8,684	19,763	(13,816)	(519)	301,686	213,194

^a The GD Towers business entity, which operated the cell tower business in Germany and Austria and was assigned to the Group Development operating segment, was recognized as a discontinued operation in the interim consolidated financial statements from the third quarter of 2022 until its sale on February 1, 2023. In accordance with the management approach, we present this reconciliation including the contributions by GD Towers under the Group Development operating segment. For information on the sale of GD Towers, please refer to the section "Group organization, strategy, and management" in the interim Group management report and the section "Changes in the composition of the Group and other transactions" in the interim consolidated financial statements.

Reconciliation for the organic development of key figures for the prior-year period^{a, b}

For the organic presentation of figures, prior-period comparatives are adjusted for the effects of changes in the composition of the Group, exchange rate effects, and other effects. This improves the informative value of the prior-year comparatives by taking account of changes to the company's structure or exchange rates.

millions of €

	H1 2023	H1 2022	Change	Change %	Reconciliation to organic figures		Organic change		
					Reconciliation H1 2022	Of which: exchange rate effects	Organic H1 2022	Change	Change %
Revenue	55,060	55,634	(574)	(1.0)	(329)	416	55,305	(245)	(0.4)
Germany	12,290	12,001	289	2.4	85	(1)	12,086	204	1.7
United States	35,817	36,320	(503)	(1.4)	314	402	36,633	(816)	(2.2)
Europe	5,683	5,411	272	5.0	4	13	5,415	269	5.0
Systems Solutions	1,905	1,869	36	1.9	(48)	2	1,821	84	4.6
Group Development	106	1,115	(1,009)	(90.5)	(1,012)	0	103	3	3.1
Group Headquarters & Group Services	1,130	1,220	(90)	(7.4)	(22)	0	1,199	(69)	(5.7)
Service revenue	45,767	44,666	1,101	2.5	(182)	310	44,484	1,283	2.9
Germany	10,901	10,645	256	2.4	85	(1)	10,730	170	1.6
United States	28,903	27,810	1,093	3.9	207	295	28,017	886	3.2
Europe	4,715	4,551	164	3.6	5	13	4,557	158	3.5
Systems Solutions	1,855	1,844	11	0.6	(48)	2	1,796	59	3.3
Group Development	0	411	(411)	(100.0)	(411)	0	0	0	n.a.
Group Headquarters & Group Services	482	514	(32)	(6.2)	4	0	518	(36)	(6.9)
EBITDA AL	31,780	18,539	13,241	71.4	(1,117)	140	17,423	14,358	82.4
Germany	4,745	6,229	(1,484)	(23.8)	46	(1)	6,275	(1,530)	(24.4)
United States	12,368	9,055	3,313	36.6	181	134	9,236	3,132	33.9
Europe	1,962	1,944	18	0.9	9	6	1,953	10	0.5
Systems Solutions	108	80	28	35.0	6	2	87	21	24.4
Group Development	13,007	1,425	11,582	n.a.	(1,354)	0	71	12,936	n.a.
Group Headquarters & Group Services	(397)	(184)	(213)	n.a.	(9)	(2)	(193)	(204)	n.a.
EBITDA AL (adjusted for special factors)	20,002	19,763	239	1.2	(233)	148	19,530	472	2.4
Germany	5,016	4,823	193	4.0	47	0	4,869	147	3.0
United States	13,090	12,509	581	4.6	186	138	12,694	396	3.1
Europe	2,007	1,961	46	2.3	8	6	1,970	37	1.9
Systems Solutions	159	147	12	8.2	7	2	154	5	3.2
Group Development	60	519	(459)	(88.4)	(478)	0	41	19	47.1
Group Headquarters & Group Services	(317)	(185)	(132)	(71.4)	(7)	1	(192)	(125)	(65.1)

^a The GD Towers business entity, which operated the cell tower business in Germany and Austria and was assigned to the Group Development operating segment, was recognized as a discontinued operation in the interim consolidated financial statements from the third quarter of 2022 until its sale on February 1, 2023. In accordance with the management approach, we present this reconciliation including the contributions by GD Towers under the Group Development operating segment. For information on the sale of GD Towers, please refer to the section "Group organization, strategy, and management" in the interim Group management report and the section "Changes in the composition of the Group and other transactions" in the interim consolidated financial statements.

^b As of the third quarter of 2022 the principal/agent consideration regarding the recognition of gross and net revenues was changed. Prior-year comparatives were adjusted retrospectively.

Glossary

For definitions, please refer to the [2022 Annual Report](#) and the glossary therein.

Disclaimer

This Report (particularly the section “[Forecast](#)”) contains forward-looking statements that reflect the current views of Deutsche Telekom’s management with respect to future events. They are generally identified by the words “expect,” “anticipate,” “believe,” “intend,” “estimate,” “aim,” “goal,” “plan,” “will,” “outlook,” or similar expressions and include generally any information that relates to expectations or targets for revenue, adjusted EBITDA AL, or other performance measures.

Forward-looking statements are based on current plans, estimates, and projections. You should consider them with caution. Such statements are subject to risks and uncertainties, most of which are difficult to predict and are generally beyond Deutsche Telekom’s control. They include, for instance, the progress of Deutsche Telekom’s staff-related restructuring measures and the impact of other significant strategic or business initiatives, including acquisitions, dispositions, and business combinations.

In addition, movements in exchange rates and interest rates, regulatory rulings, stronger than expected competition, technological change, litigation, and regulatory developments, among other factors, may have a material adverse effect on costs and revenue development.

If these or other risks and uncertainties materialize, or if the assumptions underlying any of these statements prove incorrect, Deutsche Telekom’s actual results may be materially different from those expressed or implied by such statements. Deutsche Telekom can offer no assurance that its expectations or targets will be achieved.

Without prejudice to existing obligations under capital market law, Deutsche Telekom does not assume any obligation to update forward-looking statements to account for new information or future events or anything else.

In addition to figures prepared in accordance with IFRS, Deutsche Telekom presents alternative non-GAAP performance measures, e.g., service revenue, EBITDA, EBITDA AL, adjusted EBITDA, adjusted EBITDA AL, adjusted core EBITDA AL, adjusted EBITDA AL margin, adjusted EBIT, EBIT margin, adjusted net profit/loss, adjusted earnings per share, free cash flow, free cash flow AL, gross and net debt, and net debt AL. These measures should be considered in addition to, but not as a substitute for, the information prepared in accordance with IFRS. Alternative performance measures are not subject to IFRS or any other generally accepted accounting principles. Other companies may define these terms in different ways.

For further information on alternative performance measures, please refer to the section “Management of the Group” in the 2022 combined management report ([2022 Annual Report](#)) and our [Investor Relations website](#).

The figures shown in this report were rounded in accordance with standard business rounding principles. As a result, the total indicated may not be equal to the precise sum of the individual figures.

Our Interim Group Report (PDF and online) includes references and links to websites with additional information not contained in the Interim Group Report. These references and links are purely of a supplementary nature and are only intended to simplify access to this information. Please note that this information is not part of the Interim Group Report.

Financial calendar

August 10, 2023	November 9, 2023	February 23, 2024
Publication of the Interim Group Report as of June 30, 2023	Publication of the Interim Group Report as of September 30, 2023	Press conference on the 2023 financial year and publication of the 2023 Annual Report
April 10, 2024	May 16, 2024	August 8, 2024
2024 shareholders' meeting	Publication of the Interim Group Report as of March 31, 2024	Publication of the Interim Group Report as of June 30, 2024

All dates are subject to change.

For more dates, an updated schedule, and information on webcasts, please visit our [Investor Relations website](#).

Contacts

Deutsche Telekom AG
Friedrich-Ebert-Allee 140
53113 Bonn, Germany
www.telekom.com

Media inquiries:
Corporate Communications
Phone +49 228 181 49494
Email media@telekom.de

Inquiries relating to the T-Share:
Investor Relations
Phone +49 228 181 88880
Email investor.relations@telekom.de

This Interim Group Report for January 1 to June 30, 2023 is a publication of Deutsche Telekom AG and is also available in German. The German version is legally binding.

This Interim Group Report is available [online](#).

Our Annual Report is available [online](#).

Concept: Deutsche Telekom AG

Design & technical implementation:
[nexxar GmbH, Vienna – online annual and sustainability reports](#)