

### CREDIT OPINION

28 October 2025

Update

 Send Your Feedback

#### RATINGS

##### Telekom Austria AG

Domicile	Vienna, Austria
Long Term Rating	A3
Type	LT Issuer Rating
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

#### Contacts

Carlos Winzer	+34.91.768.8238
Senior Vice President	
carlos.winzer@moodys.com	
Ignacio Villard López	+34.91.768.8208
Ratings Associate	
ignacio.villardlopez@moodys.com	
Simone Zampa	+39.02.9148.1989
Associate Managing Director	
simone.zampa@moodys.com	

## Telekom Austria AG

### Update to credit analysis

#### Summary

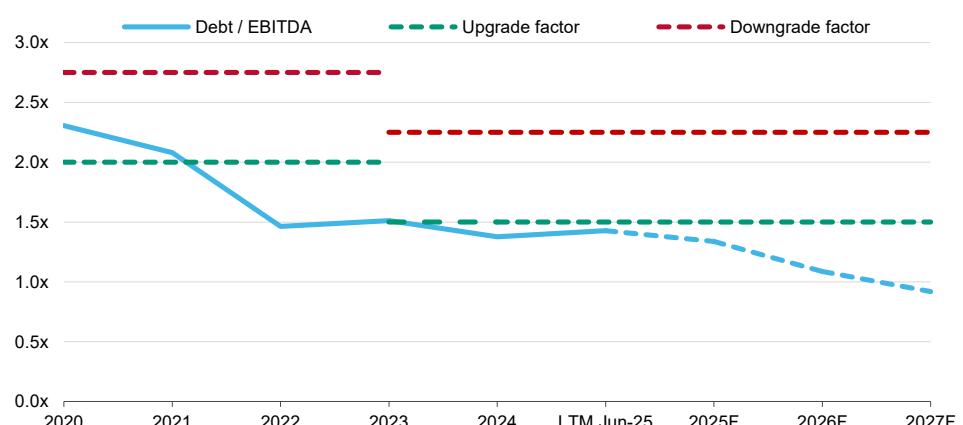
[Telekom Austria AG](#)'s rating reflects its moderate scale; its position as a strong integrated company in the highly competitive domestic telecommunications market; its geographical diversification across several Eastern European countries, mitigated by the fact that these markets are exposed to higher macroeconomic and foreign-currency risks compared with its core domestic operations; its strong cash flow generation and solid credit metrics; the company's commitment to a conservative financial strategy; and the benefits derived from [America Movil, S.A.B. de C.V.](#)'s (America Movil, Baa1 stable) 60.80% ownership stake.

However, the rating also captures the challenges posed by the highly competitive domestic and international markets; Austria's macroeconomic vulnerabilities; country and foreign-exchange risks in [Belarus](#) (C stable); and the relatively slow progress of the fiber rollout compared with the European average.

We consider Telekom Austria a government-related issuer (GRI), and its A3 rating benefits from a one-notch uplift from its baa1 Baseline Credit Assessment (BCA), reflecting the Austrian government's 28.42% ownership, a moderate level of default dependence and our assumption of moderate support from the government in case of need.

#### Exhibit 1

##### We expect Telekom Austria's leverage to be around 1.0x in the next 12-18 months



All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Moody's forecasts are Moody's opinion and do not represent the views of the issuer.

Sources: Moody's Financial Metrics™ and Moody's Ratings

## Credit strengths

- » Leading market position in [Austria](#) (Aa1 negative) and several Central and Eastern European (CEE) countries, despite operating in competitive environments
- » Commitment to maintaining an A3 rating
- » Support from the Government of Austria, which provides a one-notch uplift to the final rating
- » Strong implicit support from America Movil

## Credit challenges

- » Highly competitive domestic and international markets
- » Country and foreign-exchange risks in Belarus
- » Significant capital-intensive investments driven by accelerated fiber rollout

## Rating outlook

The stable rating outlook reflects our expectation that Telekom Austria will maintain strong financial metrics, and a solid business position in Austria and across its international footprint. Consequently, we expect the company's leverage, measured as Moody's-adjusted gross debt/EBITDA, to remain below 2.25x on a sustained basis, and its Moody's-adjusted retained cash flow (RCF)/net debt to stay above 35%.

The stable outlook also reflects our assumption that the company will continue to follow a conservative financial policy, balancing creditor protection with shareholder remuneration, and maintaining prudent liquidity risk management.

## Factors that could lead to an upgrade

Upward rating pressure could materialize if operations in the Austrian market stabilize, supported by an improving macroeconomic environment, and the company's credit metrics strengthen as a result of sustained improvements in its operating performance and cash flow generation. Such improvement would be reflected in its Moody's-adjusted gross debt/EBITDA remaining below 1.50x and Moody's-adjusted RCF/net debt exceeding 45%, both on a sustained basis.

## Factors that could lead to a downgrade

The rating could come under downward pressure if Telekom Austria's operating performance weakens due to adverse macroeconomic, regulatory, or competitive conditions; if the group's liquidity deteriorates; or if it engages in significant debt-financed acquisitions or increases shareholder remuneration, leading to deteriorating credit metrics. Specifically, this would be indicated by Moody's-adjusted gross debt/EBITDA staying above 2.25x and Moody's-adjusted RCF/net debt remaining below 35%, both on a sustained basis.

Additionally, we would likely discontinue applying the GRI methodology or incorporating an uplift into the final rating if the government reduces its stake in the group to below 20%, or if the support assumption for the group is lowered. Either of these factors would likely result in a one-notch downgrade, although there is currently no indication that either will occur.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moodys.com> for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

Telekom Austria AG

(in € billions)	2020	2021	2022	2023	2024	LTM Jun-25	2025F	2026F	2027F
Revenue	4.5	4.7	4.9	5.2	5.3	5.4	5.5	5.7	5.8
Debt / EBITDA	2.3x	2.1x	1.5x	1.5x	1.4x	1.4x	1.3x	1.1x	0.9x
RCF / Net Debt	37.2%	43.9%	54.6%	52.3%	61.4%	48.6%	71.1%	75.6%	86.1%
(EBITDA - CAPEX) / Interest Expense	6.0x	6.6x	12.4x	7.7x	8.1x	9.2x	11.5x	11.8x	12.9x
EBITDA Margin	34.8%	36.5%	37.4%	37.4%	38.1%	38.4%	37.6%	37.9%	38.1%
EBITA / Interest Expense	8.0x	9.6x	17.8x	11.8x	10.6x	10.7x	13.6x	15.6x	17.2x
FCF / Debt	9.2%	8.9%	15.1%	8.5%	11.6%	7.0%	12.0%	9.9%	11.3%

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Moody's forecasts are Moody's opinion and do not represent the views of the issuer.

Sources: Moody's Financial Metrics™ and Moody's Ratings

## Profile

Headquartered in Vienna, Austria, Telekom Austria AG is the country's leading integrated telecommunications provider. The group has a nationwide presence, offering a comprehensive range of services and products, including telephony, data exchange, interactive content, TV, and information and communications technology solutions. Beyond Austria, Telekom Austria has expanded its mobile operations internationally. It is one of the leading mobile operators in North Macedonia, Belarus, Croatia and Bulgaria, and also operates in Slovenia and Serbia.

Telekom Austria's main shareholders are America Movil, holding 60.80% (and fully consolidating Telekom Austria), and the Austrian government, through Österreichische Beteiligungs AG (ÖBAG), with a 28.42% stake. For the 12 months that ended on 30 June 2025, the company reported revenue of €5.5 billion and EBITDA of €1.8 billion.

## Detailed credit considerations

### Leading market position, despite operating in highly competitive environments

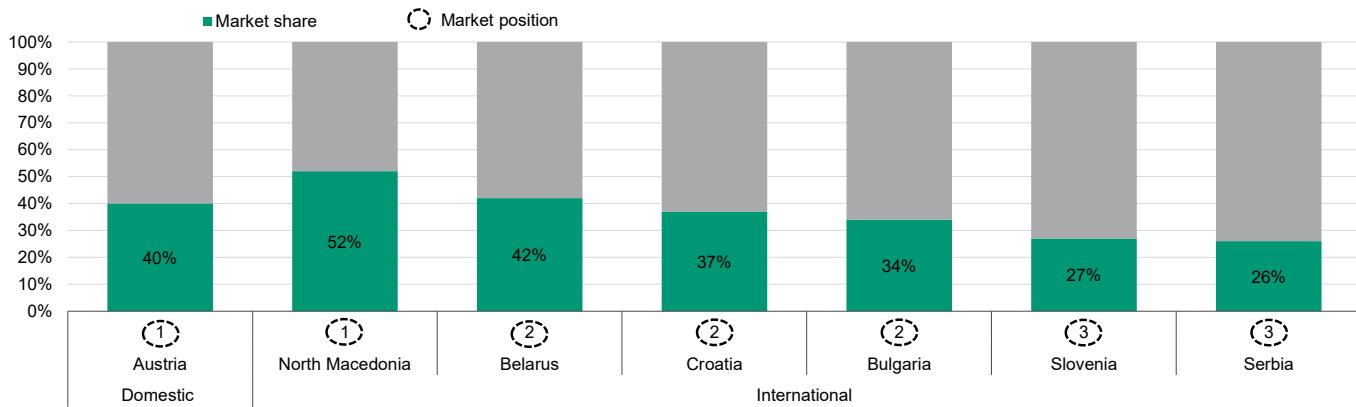
Telekom Austria maintains a stable, leading position in the Austrian mobile market across both wireline and wireless segments, with a 40% market share (see Exhibit 3), ahead of T-Mobile Austria GmbH and Hutchison Drei Austria GmbH.

Telekom Austria's core markets are characterised by intense competition in both mobile and fixed communications. In Austria, the company continues to face persistent pricing pressure, particularly in the lower end of the market, driven by aggressive pricing strategies from mobile virtual networks operators (MVNOs). In addition, Austria's prevailing macroeconomic vulnerabilities are exacerbating existing market pressures.

As of March 2025, Telekom Austria was among the leading mobile operators in North Macedonia (number one by mobile market share), Belarus, Croatia and Bulgaria (number two by mobile market share), and also operated in Slovenia and Serbia (number three by mobile market share) (see Exhibit 3).

## Exhibit 3

**Telekom Austria is the market leader in Austria and acts as a challenger in most of its international operations**  
 Market share in mobile and market position as of Q1 2025

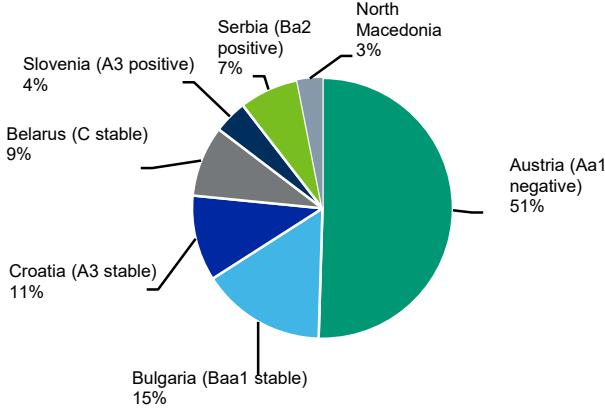


Source: Company data

The benefits of Telekom Austria's diversification across several Eastern European countries are offset by its exposure to higher macroeconomic and foreign-currency risks. Furthermore, as Exhibit 5 shows, 39% of its operating cash flow was generated in Austria during the first half of 2025.

## Exhibit 4

**Austria accounts for 51% of revenue**  
 Revenue breakdown by geography (H1 2025)

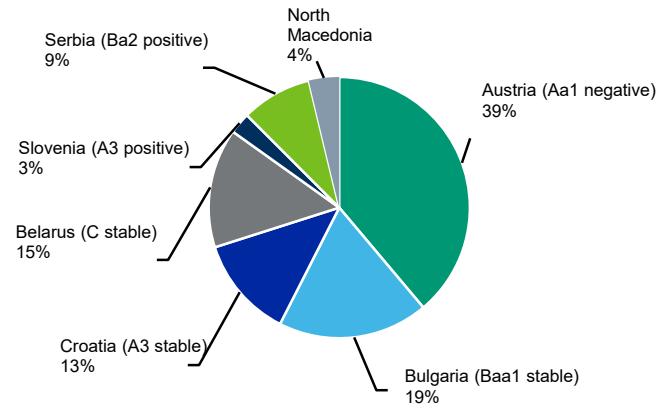


Corporate, other and eliminations are excluded from the calculation.

Source: Company data

## Exhibit 5

**Austria accounts for 39% of operating free cash flow**  
 Operating free cash flow breakdown by geography (H1 2025)



Corporate, other and eliminations are excluded from the calculation.

Source: Company data

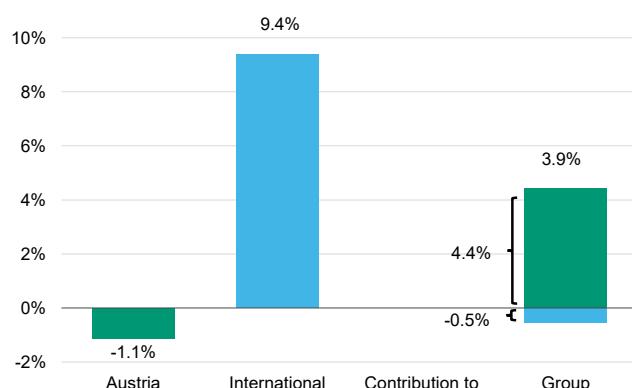
### Solid operating performance driven by international operations

Telekom Austria's revenue grew by 3.9% in the first six months of 2025, reaching €2.7 billion. Growth was driven primarily by international operations, which reported 9.4% revenue growth, while the domestic business remained broadly flat at -1.1% (see Exhibit 6). Mobile service revenue and fixed service revenue increased 2.8% and 2.5%, reaching €1.3 billion and €1.0 billion, respectively, during the same period. Equipment revenue rose sharply by 13.1% (see Exhibit 7).

## Exhibit 6

**Telekom Austria's revenue grew by 3.9%, driven by international operations**

Reported revenue growth and contributions by geography (H1 2025)

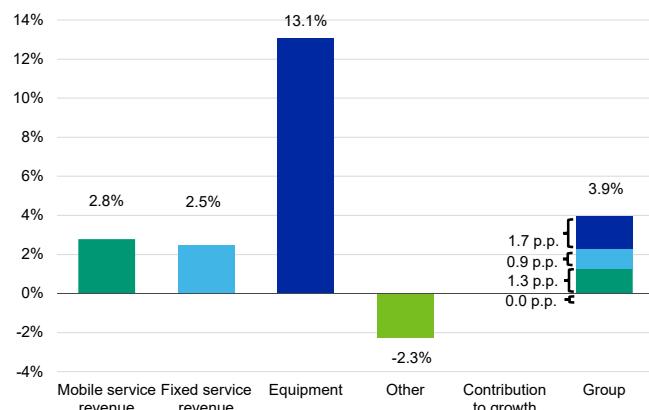


Source: Company data

## Exhibit 7

**Telekom Austria's revenue grew by 3.9%, supported by both mobile and fixed segments**

Reported revenue growth and contributions by business segments (H1 2025)



Source: Company data

### Credit metrics will remain solid

We expect Telekom Austria to maintain its strong market position in Austria and to continue delivering solid operating performance, despite competitive and macroeconomic pressures across its markets.

Leverage, measured as Moody's-adjusted gross debt/EBITDA, was 1.4x as of the 12 months that ended on 30 June 2025. We expect leverage to continue to decline over the next 12-18 months, supported by robust free cash flow generation and debt repayments following upcoming maturities.

We acknowledge Telekom Austria's current financial flexibility and expect management to preserve the group's financial strength by managing capital spending, M&A activity, and shareholder remuneration in line with its stated commitment to an A3 rating.

America Movil, Telekom Austria's major shareholder with a 60.80% stake, has been instrumental in supporting its leverage reduction plan. It has also played a key role in Telekom Austria's strategic execution by enhancing purchasing power with vendors and strengthening relationships with financial institutions, shifting the focus from a marketing-led approach to a revenue-oriented strategy, and maintaining a strong emphasis on operational efficiency and cost savings.

### High capital spending for investments in fiber and 5G

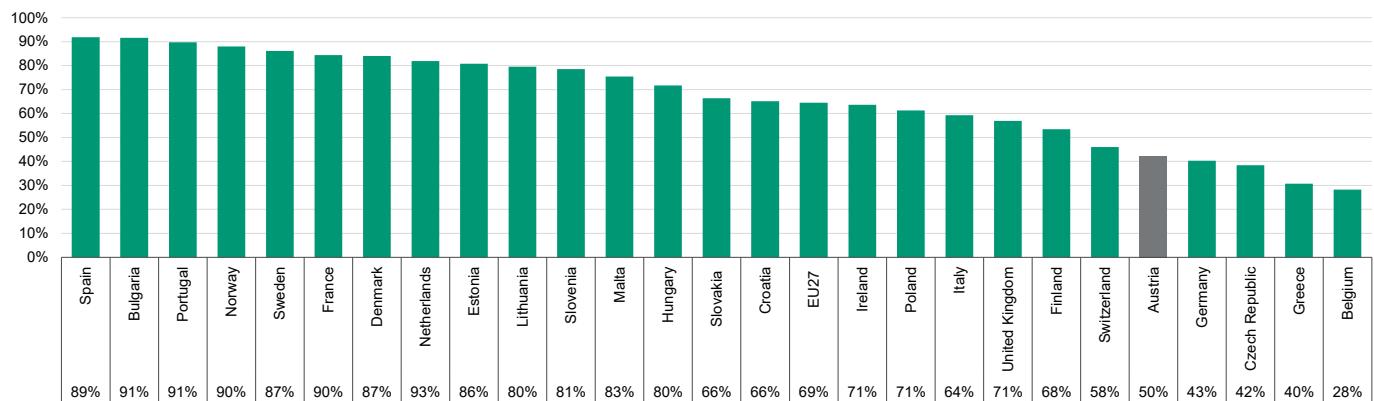
The group's key investment priorities include the development of the 5G mobile networks across its markets and the accelerated rollout of fiber infrastructure in Austria.

Telekom Austria will continue upgrading its fixed network to meet growing demand for high-bandwidth broadband solutions. Expanding FTTH (fiber-to-the-home) coverage remains essential to improve network quality and competitiveness relative to other EU operators.

Telekom Austria expects capital spending (excluding spectrum) to decline to less than €800 million by 2025. This reduction reflects lower investments in Austria and CEE markets, following significant progress in the 5G rollout. Capital spending will remain the primary use of cash flow, except in cases of extraordinary dividend payments or M&A activity.

## Exhibit 8

**Austria lags other European markets in terms of FTTH coverage**  
FTTH coverage as of September 2024



Source: FTTH Council Europe's Market Intelligence Committee

## ESG considerations

Telekom Austria AG's ESG credit impact score is **CIS-2**

## Exhibit 9

ESG credit impact score

# CIS-2

Score



ESG considerations do not have a material impact on the current rating.

Source: Moody's Ratings

Telekom Austria's **CIS-2** indicates that ESG considerations have low credit impact on Telekom Austria's current rating, as the company has historically maintained a conservative financial policy with a strong track record of managing the environmental and social risks.

## Exhibit 10

ESG issuer profile scores

# E-2

Environmental

Score



# S-3

Social

# G-2

Governance

Source: Moody's Ratings

## Environmental

Telekom Austria's **E-2** is driven by its low exposure to environmental risks and is in line with the overall industry. The company's objectives to increase renewable power usage is in line with telecommunications industry trends. The nature of its telecommunications

activities, with limited exposure to physical climate risk and very low emissions of pollutants and carbon, results in low environmental risk.

### Social

Telekom Austria's **S-3** reflects moderate social risks, including exposure to well entrenched labour unions with rigid employee regulations and changing demographic and societal trends towards the use of telecom related technology. This is partially mitigated through Telekom Austria's end products and services which include Telekom Austria's ability to adapt its services to cater to its customers' requirements. Data security and data privacy issues are prominent in the sector. Telecommunications providers exchange large amounts of data, and a breach could cause legal, regulatory or reputation issues. In addition, a breach could result in increased operational costs to mitigate cyberattacks and reduce exposure to the loss of private data.

### Governance

Telekom Austria **G-2** reflects its track record of maintaining a solid balance sheet and conservative financial policies. Telekom Austria is a public company, with the Austrian government owning 28.43% of the company. In addition, America Movil (Baa1 stable), owns a 60% equity stake, controls and fully consolidates Telekom Austria into its accounts.

ESG Issuer Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

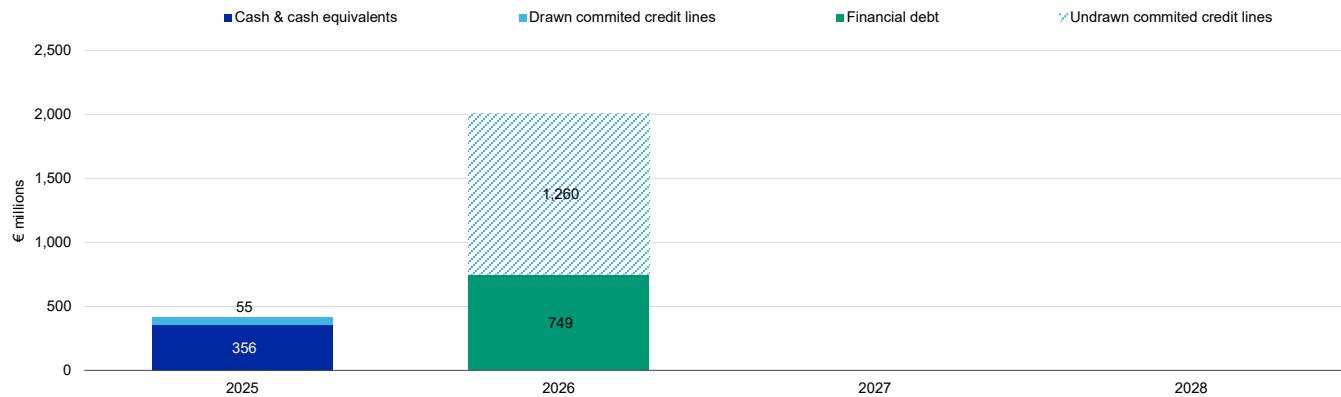
### Liquidity analysis

As of September 2025, Telekom Austria held €356 million in cash and cash equivalents. In addition, the group has access to a €1.315 billion committed credit facility, which is not subject to any significant adverse change clauses or financial covenants, of which €1.260 billion remains undrawn.

Telekom Austria's liquidity is sufficient to cover its cash needs over the next 12-24 months. However, the company faces a debt maturity wall in 2026, when its syndicated credit facility and a €750 million bond mature. While the company has a track record of aggressive management of debt maturities, the rating reflects our expectation that refinancing needs will be addressed at least one year before maturity.

Exhibit 11

**Telekom Austria's debt load has declined in recent years; however, a significant debt maturity wall remains in 2026**  
**Telekom Austria's maturity profile as of September 2025**



Source: Company data

### GRI considerations

Because Telekom Austria is 28.42% owned by the Austrian government, the group is considered a GRI under our methodology. Accordingly, we consider the following inputs:

1. A BCA of baa1, reflecting Telekom Austria's underlying credit strength

2. Austria's local-currency rating of Aa1 with a negative outlook
3. Moderate default dependence, reflecting the financial and operational links between the group and the Austrian economy

We have factored into Telekom Austria's rating a moderate level of government support based on the following considerations:

1. There is no explicit expression of support from the government (that is, the government does not guarantee the debt of the GRI)
2. The government's 28.42% ownership, combined with its willingness to act as a rational shareholder, suggests that it is unlikely to be the sole provider of support — instead, it would only consider providing support jointly with other shareholders in the form of a capital increase.
3. There are EU policy barriers to the provision of direct financial support, and the government is likely to abide by these rules.
4. We view the Austrian government's historical approach as moderately interventionist — it reviews and supervises Telekom Austria's business and funding plans, which we see as a positive factor in terms of support assumptions, and appoints several board members. It is unlikely that the government's reputation would suffer in the event of a default by Telekom Austria.

## Methodology and scorecard

### Rating methodology and scorecard factors

The A3 forward-looking outcome from the Telecommunications Service Providers rating methodology scorecard is one notch higher than Telekom Austria's BCA of baa1. This discrepancy reflects the expectation that Telekom Austria will use its current financial flexibility while maintaining financial strength, aligned with its commitment to a strong credit profile. The final rating benefits from a one-notch uplift because of government support.

Exhibit 12

Telekom Austria AG

Telecommunications Service Provider Industry Scorecard [1][2]			Current	LTM June 30 2025	Moody's 12-18 Month Forward View [3]	
			Measure	Score	Measure	Score
<b>Factor 1: Scale (10%)</b>						
a) Revenue (USD Billion)			5.9	Ba	6.2	Ba
<b>Factor 2: Business Profile (25%)</b>						
a) Competitive Position			A	A	A	A
b) Market Share			Baa	Baa	Baa	Baa
<b>Factor 3: Profitability And Efficiency (10%)</b>						
a) Revenue and Margin Sustainability			Baa	Baa	Baa	Baa
<b>Factor 4: Leverage And Coverage (40%)</b>						
a) Debt / EBITDA			1.4x	A	1.1x	A
b) RCF / Net Debt			48.6%	Baa	75.6%	Aa
c) (EBITDA - CAPEX) / Interest Expense			9.2x	Aaa	11.8x	Aaa
<b>Factor 5: Financial Policy (15%)</b>						
a) Financial Policy			Baa	Baa	Baa	Baa
<b>Ratings</b>						
a) Scorecard-Indicated Outcome				Baa1		A3
b) Actual Rating Assigned						A3
<b>Government Related Issuers</b>						
a) Baseline Credit Assessment				baa1		
b) Government Local Currency Rating				Aa1		
c) Default Dependence				Moderate		
d) Support				Moderate		
e) Actual Rating Assigned				A3		

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

[2] As of June 30, 2025(LTM)

[3] This represents Moody's Forward View; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures

Source: Moody's Financial Metrics™; Moody's Projections

## Appendix

Exhibit 13

### Peer comparison

Telekom Austria AG

(in \$ millions)	Telekom Austria AG			Swisscom AG			Deutsche Telekom AG			Telia Company AB			Elisa Corporation		
	A3 Stable			A2 Stable			A3 Stable			Baa1 Stable			Baa2 Stable		
	Dec-23	FY	LTM	Dec-23	FY	LTM	Dec-23	FY	LTM	Dec-23	FY	LTM	Dec-23	FY	LTM
Revenue	5,579	5,751	5,897	12,328	12,541	15,054	121,083	125,262	128,277	8,353	8,435	8,628	2,358	2,371	2,420
EBITDA	2,087	2,192	2,263	5,146	5,076	6,079	46,264	52,077	54,504	2,827	2,825	3,004	822	828	856
Total Debt	3,223	2,889	3,484	9,167	19,471	21,235	162,241	156,412	167,187	10,370	8,106	8,992	1,519	1,624	1,882
Cash & Cash Equivalents	186	380	417	176	1,681	193	7,920	8,558	12,013	1,860	989	1,026	70	93	121
EBITDA Margin	37.4%	38.1%	38.4%	41.7%	40.5%	40.4%	38.2%	41.6%	42.5%	33.8%	33.5%	34.8%	34.8%	34.9%	35.4%
(EBITDA - Capex) / Interest Expense	7.7x	8.1x	9.2x	16.6x	9.4x	6.4x	3.0x	3.8x	4.1x	2.6x	2.6x	3.2x	15.4x	11.2x	10.4x
Debt / EBITDA	1.5x	1.4x	1.4x	1.7x	4.0x	3.2x	3.4x	3.1x	2.8x	3.5x	3.0x	2.8x	1.8x	2.0x	2.0x
FCF / Debt	8.5%	11.6%	7.0%	5.0%	1.7%	2.6%	7.4%	8.4%	9.4%	1.1%	-4.4%	-2.0%	-1.7%	-2.5%	-2.2%
RCF / Debt	49.3%	53.4%	42.7%	38.0%	15.5%	20.6%	23.3%	23.8%	25.6%	18.0%	17.8%	20.4%	20.8%	17.4%	16.7%

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Source: Moody's Financial Metrics™

## Exhibit 14

**Moody's-adjusted debt reconciliation**  
**Telekom Austria AG**

(in € millions)	2020	2021	2022	2023	2024	LTM Jun-25
<b>As reported debt</b>	<b>3,397.7</b>	<b>3,366.4</b>	<b>2,549.6</b>	<b>2,763.5</b>	<b>2,649.1</b>	<b>2,827.0</b>
Pensions	179.5	176.0	137.6	154.2	140.9	140.9
<b>Moody's-adjusted debt</b>	<b>3,577.2</b>	<b>3,542.4</b>	<b>2,687.2</b>	<b>2,917.8</b>	<b>2,790.1</b>	<b>2,967.9</b>

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Source: Moody's Financial Metrics™

## Exhibit 15

**Moody's-adjusted EBITDA reconciliation**  
**Telekom Austria AG**

(in € millions)	2020	2021	2022	2023	2024	LTM Jun-25
<b>As reported EBITDA</b>	<b>1,555.9</b>	<b>1,708.2</b>	<b>1,845.3</b>	<b>1,932.9</b>	<b>2,029.5</b>	<b>2,082.5</b>
Pensions	(4.4)	(4.6)	(4.2)	4.0	(3.3)	(3.3)
Interest Expense - Discounting	-	-	(4.9)	(6.9)	-	-
<b>Moody's-adjusted EBITDA</b>	<b>1,551.5</b>	<b>1,703.6</b>	<b>1,836.3</b>	<b>1,930.0</b>	<b>2,026.2</b>	<b>2,079.2</b>

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Source: Moody's Financial Metrics™

## Exhibit 16

**Overview on selected historical and forecast Moody's-adjusted financial data**  
**Telekom Austria AG**

(in € millions)	2020	2021	2022	2023	2024	LTM Jun-25	2025F	2026F	2027F
<b>INCOME STATEMENT</b>									
Revenue	4,464	4,666	4,916	5,159	5,315	5,418	5,545	5,691	5,837
EBITDA	1,551	1,704	1,836	1,930	2,026	2,079	2,086	2,155	2,222
<b>BALANCE SHEET</b>									
Cash & Cash Equivalents	211	534	150	169	367	355	700	351	261
Total Debt	3,577	3,542	2,687	2,918	2,790	2,968	2,790	2,341	2,041
<b>CASH FLOW</b>									
Capital Expenditures	(896)	(1,008)	(1,055)	(1,166)	(1,153)	(1,078)	(1,101)	(1,221)	(1,251)
Dividends	(153)	(167)	(187)	(213)	(240)	(506)	(266)	(293)	(319)
Retained Cash Flow (RCF)	1,254	1,319	1,385	1,437	1,489	1,269	1,485	1,504	1,533
RCF / Net Debt	37.2%	43.9%	54.6%	52.3%	61.4%	48.6%	71.1%	75.6%	86.1%
Free Cash Flow (FCF)	331	315	405	248	323	207	334	233	231
FCF / Debt	9.2%	8.9%	15.1%	8.5%	11.6%	7.0%	12.0%	9.9%	11.3%
<b>PROFITABILITY</b>									
EBITDA Margin	34.8%	36.5%	37.4%	37.4%	38.1%	38.4%	37.6%	37.9%	38.1%
<b>INTEREST COVERAGE</b>									
(EBITDA - CAPEX) / Interest Expense	6.0x	6.6x	12.4x	7.7x	8.1x	9.2x	11.5x	11.8x	12.9x
<b>LEVERAGE</b>									
Debt / EBITDA	2.3x	2.1x	1.5x	1.5x	1.4x	1.4x	1.3x	1.1x	0.9x

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Moody's forecasts are Moody's opinion and do not represent the views of the issuer.

Sources: Moody's Financial Metrics™ and Moody's Ratings

## Ratings

## Exhibit 17

Category	Moody's Rating
TELEKOM AUSTRIA AG	
Outlook	Stable
Issuer Rating	A3

Senior Unsecured MTN -Dom Curr	(P)A3
Commercial Paper -Dom Curr	P-2
Other Short Term -Dom Curr	(P)P-2
<b>TELEKOM FINANZMANAGEMENT GMBH</b>	
Outlook	Stable
Bkd Senior Unsecured -Dom Curr	A3
Bkd Commercial Paper -Dom Curr	P-2
Bkd Other Short Term -Dom Curr	(P)P-2

Source: Moody's Ratings

© 2025 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Materials.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and all MCO entities that issue ratings under the "Moody's Ratings" brand name ("Moody's Ratings"), also maintain policies and procedures to address the independence of Moody's Ratings' credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [ir.moody's.com](http://ir.moody's.com) under the heading "Investor Relations — Corporate Governance — Charter and Governance Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V, I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Clasificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions and Net Zero Assessments (as defined in Moody's Ratings Rating Symbols and Definitions): Please note that neither a Second Party Opinion ("SPO") nor a Net Zero Assessment ("NZA") is a "credit rating". The issuance of SPOs and NZAs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs and NZAs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

REPORT NUMBER

1463116