REGULATORY FACTSHEET: RETURN ON EQUITY, COST OF DEBT AND WACC

As of 21 January 2026

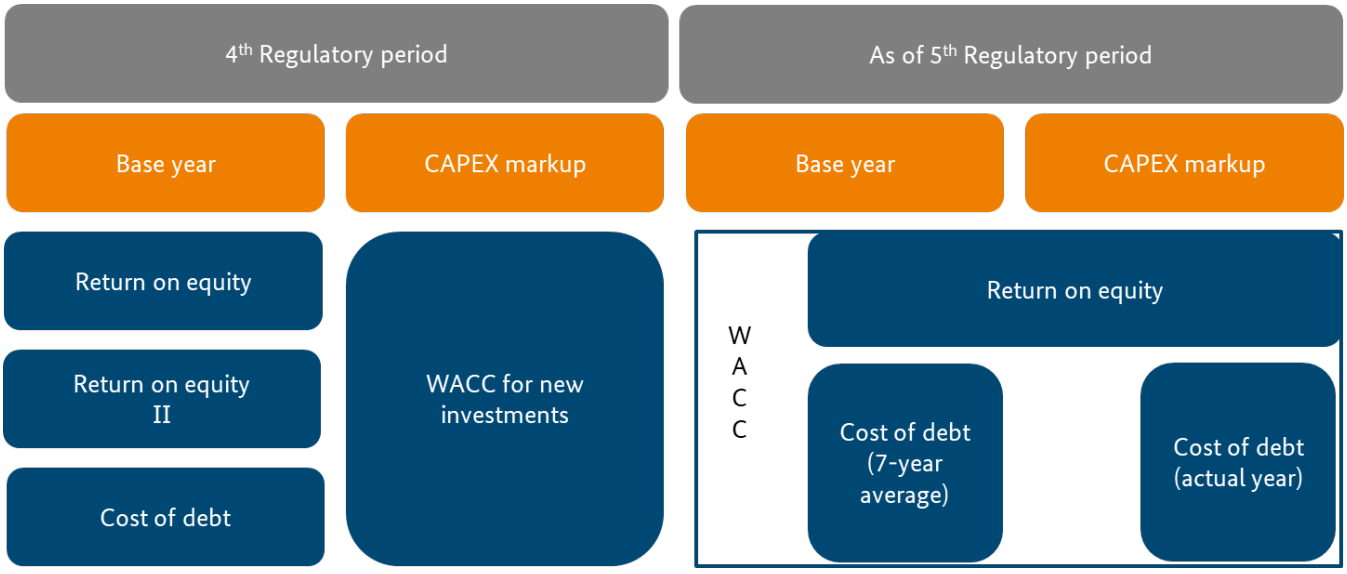
The Bundesnetzagentur determines the regulated – imputed – return on equity (and in future the WACC) prior to the start of the next regulatory period for the duration of a regulatory period. This interest rate is multiplied by the regulatory asset base (RAB) and is included in the revenue cap. Currently, we are in the 4th regulatory period (2024-2029 for electricity and 2023-2028 for gas).

As of 2024, we differentiate between the interest rate for assets in the base year and for investments during the regulatory period (CAPEX markup).

As from the 5th regulatory period, we are switching to a weighted average cost of capital (WACC) for assets in the base year as well, with a flat-rate mixed interest rate based on equity (40%) and debt (60%). For the equity, we continue to apply the capital assets pricing model (CAPM). The future rules described below apply to electricity distribution, gas distribution and gas transmission system operators. A different regulatory system including a different approach for the cost of debt is under consultation for the electricity TSOs.

Figure 1 summarises the different parameters. This factsheet sets out the underlying references for the respective interest rates in both regulatory periods.

Figure 1: Outline of the Bundesnetzagentur's approach for the regulated return



4th regulatory period

We apply different and separate approaches for the return on equity and the cost of debt in the 4th regulatory period. The details are outlined below:

Base year, return on equity (max 40%)[1]

Figure 2: Approach and building blocks for the return on equity

Building block	Value	Reference
Risk-free rate[2]	0.74%	10-year average on bonds (yields on fixed-income securities issued by domestic issuers)
Market risk premium	3.7%	DMS world 2021
Sector-specific risk factor (equity beta)	0.81	Company-specific risk reflected by 11 network operators from seven countries
Correction	0.395%	Correction for methodological differences in the time series for the risk-free rate and the time series from DMS
Sector-specific risk premium	3.39%	Market risk premium x equity beta + correction
Return on equity	4.13%	After tax, assets after 2006
Tax factor	1.226	Corporate tax and solidarity surcharge
Return on equity	**5.07%**	**Pre-tax, assets after 2006**

Base year, return on equity II

The interest rate for the portion of equity exceeding 40% (equity II) is determined as a weighted average of the average of the following yields published by the Deutsche Bundesbank, based on the last ten completed calendar years:

- public sector bonds (simple-weighted)[3],
- corporate bonds (double-weighted)[4].

With this, we approximate the cost of debt. Different base years apply for gas (2.03%, base year 2020) and electricity (1.71%, base year 2021).

[1] Bundesnetzagentur - Beschlüsse Eigenkapitalzinssatz
[2] | Deutsche Bundesbank
[3] | Deutsche Bundesbank
[4] | Deutsche Bundesbank

Base year, cost of debt

Until the end of the 4th regulatory period, we recognise the cost of debt individually per network operator in the regulatory allowance (as OPEX) if it corresponds to usual capital market practice.

CAPEX markup, WACC for new investments

The return on equity for new investments within the CAPEX markup consists of an annually variable base interest rate plus a constant sector-specific risk premium of 3% and a constant tax factor. This rate is adjusted for each acquisition year beginning with 2024 to reflect the actual risk-free rate and is carried forward until the end of the regulatory period. To calculate this rate in the acquisition year, a projected value is initially used. Once the final value to be applied is determined, differences are adjusted via the regulatory account. The same logic of an annual adjustment applies to the cost of debt. For investments of the years 2021 (only gas), 2022 and 2023, the initial base-year rate of return is used. The relevant figures can be found in the table below.

Year	Risk-free rate	Sector-specific risk premium	RoE before tax	Cost of debt	WACC gearing: 60%
Actual values					
2022	0.74%	4.16%	5.07%	1.71%	3.05%
2023	0.74%	4.16%	5.07%	1.71%	3.05%
2024	2.65%	3%	6.93%	3.87%	5.09%
Projected values					
2025	2.67%	3%	6.95%	3.87%	5.10%
2026	2.71%	3%	7.00%	3.67%	5.00%

5th regulatory period

As from the 5th regulatory period, we will switch to a WACC approach, which is based on the determination for the methodology. Prior to each new regulatory period, the concrete WACC rate is determined via separate determinations: for gas before 2028, for electricity before 2029. This means that we will no longer examine in detail the actual distribution of equity and debt for each individual grid operator. We will only specify an overall return on capital, which applies to the whole regulatory period.

Base year, WACC, return on equity (40%)

For the **risk-free rate**, we will refer to zero-coupon government bonds or AAA EU bonds in euro with a remaining term of 10 to 20 years. The average is based on the length of the regulatory period. The selection of the specific series is made within the determination for the concrete WACC rate.

The **sector-specific risk premium** will be determined from the **sector-specific risk factor** (equity beta) and the **market risk premium.** For the **market risk premium**, we will refer to historical excess returns compared with bonds. The selection of the data series will be made in the determination for the concrete WACC rate. As before, a large country portfolio applies. We will calculate the market risk premium differently than in the past and use an arithmetic mean. The **sector-specific risk factor** (equity beta) will be determined based on the development of securities traded on national and international capital markets by comparable network operators.

CAPEX markup, WACC, return on equity (40%)

The same methodology applies as for the base year.

Base year, WACC, cost of debt (60%)

In the base year, a seven-year average will apply for the cost of debt, weighted each year with the overall investment volume p.a. For the underlying time series, we will shift to corporate bonds in euro with a duration of approximately 10 years. We consider infrastructure investments as long-term investments and we will use data from network operators to ensure that a duration of 10 years is feasible. The credit risk rating underlying the bond index must be consistent with the risk profiles of German network operators observable in the market (= BBB).

CAPEX markup, WACC, cost of debt (60%)

For new investments, a dynamic adjustment of debt financing costs is planned, based on the current interest rate of the actual year. The return on equity will remain unchanged for the whole regulatory period.