

**CREDIT OPINION**

1 August 2024

Update

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**RATINGS**

**Nordrhein-Westfalen, Land of**

Domicile	Germany
Long Term Rating	Aa1
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.

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# Land of Nordrhein-Westfalen (Germany)

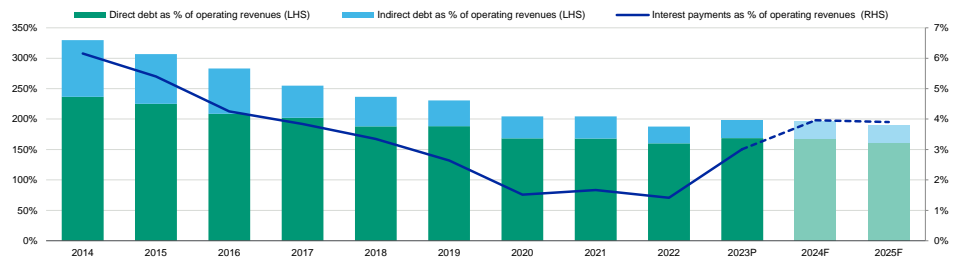
Update following methodology update

**Summary**

The credit profile of the [Land of Nordrhein-Westfalen](#) (NRW, Aa1 stable) reflects its well-diversified and strong regional economy, as well as its excellent market access, good liquidity, sound debt management, as well as expense pressure. While the land has very high debt, at around 198% of operating revenues, we note the land's continued debt reduction efforts that will continue over time (see Exhibit 1). Despite the increase in interest burden since 2022 the interest cost pressure will remain manageable. Similar to all German regions, NRW faces substantial cost pressure, combined with limited financial flexibility, in addition to demographic pressures from its ageing population with related pension costs. The credit profile also reflects our assessment of a very high likelihood that the [Government of Germany](#) (Aaa stable) would provide support in acute liquidity stress.

Exhibit 1

**Nordrhein-Westfalen's very high debt levels are expected to decrease from 2024 onwards**



2023P - Preliminary data; 2024-25F - Moody's forecast.

Sources: Issuer, German Statistics Office, German Ministry of Finance and Moody's Ratings

**Credit strengths**

- » Largest regional economy, with some pressure stemming from energy transition
- » Excellent market access and solid liquidity, supported by strong debt management
- » Budgetary performance challenged by operating costs pressures

**Credit challenges**

- » Very high debt level, some contingent liabilities and social risks from demographics
- » Low revenue and expenditure flexibility

## Rating outlook

The rating outlook on NRW is stable, reflecting manageable though weaker than expected 2024 and 2025 financial position, with stable debt burden.

## Factors that could lead to an upgrade

Upward rating pressure could arise if there is a significant improvement in NRW's financial performance, debt reduction, combined with a sustained track record of balanced financial budgets.

## Factors that could lead to a downgrade

The following factors could lead to a downgrade of Land of NRW's rating: a significant deterioration in the land's fiscal metrics leading to a substantial increase in debt levels, any alterations in the fundamental supportive structure of the Länder (regional governments) sector or a downgrade of Germany's sovereign rating.

## Key indicators

### Land of Nordrhein-Westfalen

Nordrhein-Westfalen, Land of	2020	2021	2022	2023P	2024F	2025F
Cash and cash equivalents as % of operating revenues	13.9	18.3	21.4	22.3	22.4	21.6
Primary operating balance (POB) as % of operating revenues	-2.5	4.2	6.8	9.8	12.5	12.8
Interest payments as % of operating revenues	1.5	1.7	1.4	3.0	4.0	3.9
Capital expenses (Capex) as % of total expenses	9.7	8.9	11.5	10.6	10.7	10.7
Financing result (surplus or deficit) as % of total revenues	-12.7	-4.9	-4.3	-1.6	1.2	0.7
Net direct and indirect debt (NDID) as % of operating revenues	204.5	204.4	187.8	197.6	197.3	189.7

2023P - Preliminary data; 2024-25F - Moody's forecast.

Source: Issuer, German Statistics Office, German Ministry of Finance and Moody's Ratings

## Detailed credit considerations

The credit profile of NRW, as expressed in its Aa1 stable rating, combines its BCA of aa3 and a very high likelihood of extraordinary support coming from the federal government in the event that the land faces acute liquidity stress.

### Baseline Credit Assessment

#### Largest regional economy, with some pressure stemming from energy transition

NRW is by far the most populous land in Germany, with around 18 million inhabitants, or around 22% of the national population. Its GDP makes up around 21% of Germany's GDP and its per capita GDP is just below the German average (96%). 20 of the largest 50 German companies are headquartered in NRW.

We expect the German GDP to grow by 0.3% in 2024, with a pick up growth starting in the second half of the year, and 1.6% in 2025. Overall we expect NRW's real GDP to continue to move roughly in line with the national average. In 2023, the land's real GDP contracted 1.0%, which is slightly weaker than the national average (-0.2%). This can be attributed to the manufacturing industry (including construction) where economic output declined by 1.7% in 2023, counterbalanced in part by the service sector which recorded a real GDP growth of 2.2%.

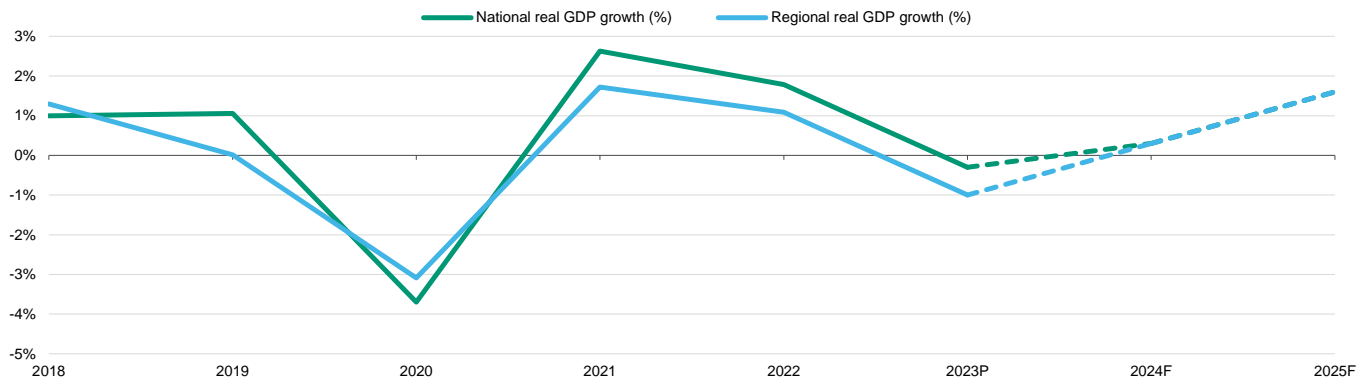
We expect NRW's manufacturing sector and heavy industry (steel and coal) will continue to suffer from higher energy prices and transition costs to adhere to net zero targets. NRW committed to net zero targets by 2045 (Germany at national level 2045, EU by 2050). As such, the land is actively promoting innovative and green technologies and initiating several decarbonization projects, including the creation of a Hydrogen Hub in the Ruhr region. Besides the impact of costs to NRW to support these developments, we also expect opportunities to arise in the medium term from investments in innovation and green technologies, which are experiencing

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global demand and could move up the value chain of employment for the land. A cleaner environment should also have positive effects on public health.

Exhibit 3

### NRW's and Germany's real GDP growth rates are closely connected, also because of the size of the region's economy



2023P - Preliminary data; 2024-25F - Moody's forecast.

Sources: German Statistics Office and Moody's Ratings

### Excellent market access and solid liquidity supported by strong debt management

NRW has excellent access to capital markets, as well as excellent liquidity and debt management. As an active and sophisticated capital markets issuer, the region has financial relationships with a broad range of investors, which are willing to grant it continued access to liquidity based on their confidence in the German Länder solidarity and debt brake mechanism. Its bonds are eligible for the European Central Bank's public-sector purchasing programme, which supports the very low interest levels. Since 2019, NRW has been able to issue three bonds with a very long maturity of 100 years, and a couple of 50 year bonds, which reduces refinancing risk for the land and, at the same time, locked in then relatively low interest payments. This is strongly positive in view of the current increasing interest rate environment. Weighted average remaining maturity stands at about 19 years.

In the money markets, NRW has access to the inter-Länder liquidity pool, whereby individual Länder offer their surplus cash to other Länder, as well as access to the German state financing agency (BRD Finanzagentur GmbH).

The land's access to capital markets is supported by a broad set of instruments and currencies. Since 2015, the land has issued several sustainability bonds and is committed to allocate the proceeds for a range of sustainability-related initiatives. The issuance of sustainability bonds is credit positive because it widens NRW's investor base, and helps communicate and support its sustainable development policy.

In terms of liquidity, the land has solid cash and cash equivalents available on short notice averaging around 20% of operating revenues in the past three years. In nominal terms, approximately Eur 2.7 billion in cash with an additional Eur 18.8 billion on equivalent reserves.

Budgetary discipline, via the debt brake mechanism, is a constitutional requirement that mandates each region to maintain structurally balanced budgets since 2020. However, the federal constitutional requirement was suspended for 2020, 2021 and 2022 to help alleviate the economic and social pressures from the pandemic which was seen as an extraordinary emergency situation. Accordingly, NRW established two special funds (Sondervermögen "NRW-Rettungsschirm" and "Krisenbewältigung"), which were set up with supplementary budgets in 2020 and 2022 to fund pandemic-related additional expenditure, tax revenue losses as well as expenses with regards mainly to the energy crises (with a volume of up to Eur 25 billion the former and Eur 5 billion the latter).

### Budgetary performance challenged by operating cost pressures

We expect 2024 flat operating revenues, as higher tax revenues - though less than initially expected from NRW - will compensate for lower federal transfers. While inflation is slowing - expected at 2.7% in 2024 - it will still contribute to tax growth through VAT related tax items. Operating expenses are expected to decrease - compared to 2023 - primarily from less spending on extraordinary items (pandemic and energy crises related). Nonetheless, pressure remains due to higher personnel costs from both salary increases and increased staffing levels. Furthermore, in 2023 social expenses and transfers to municipalities (to compensate them for social expenses)

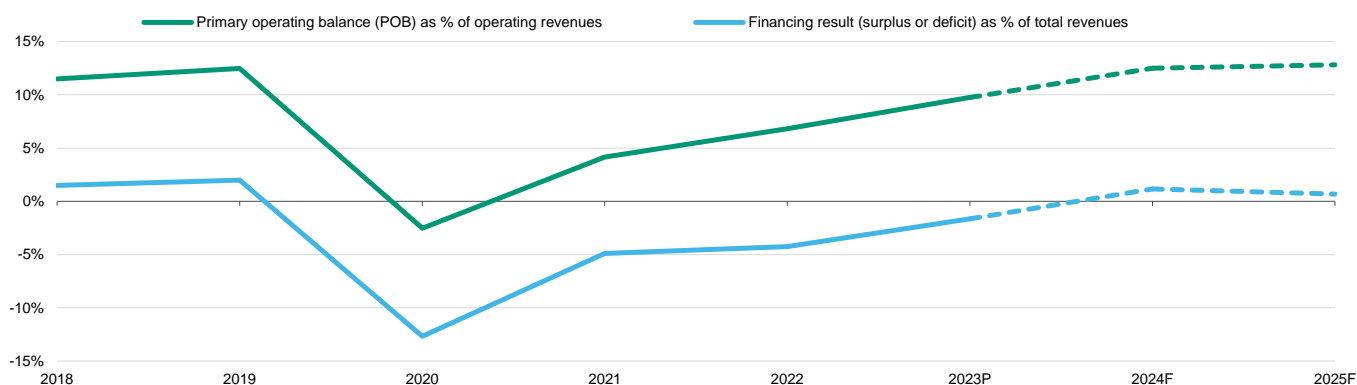
increased, mainly due to rising immigration related costs, which more than offset spending saved elsewhere in the budget. We expect similar dynamics in 2024 and 2025, in which the land will face difficulty balancing without reducing services and capital expenses.

NRW's primary operating balance as of operating revenues is expected at a solid 13.8% in 2024 (up from 9.8% in 2023), and we expect a similar level, also in 2025, on growth of operating revenues on more pronounced economic growth. To achieve these results the land will be supported by the German strong and predictable equalisation system that combines tax sharing and financial transfers, a strong credit positive. With the amended financial equalisation scheme, from 2020, the Länder sector benefitted financially because of a higher share in value-added tax revenue, higher general federal transfers and higher supplementary transfers.

The land remains committed to an ambitious pipeline of capital expenditure during 2024 with capital expenditure as a percentage total expenses at 10.7% in line with 2023 and also expected for 2025, which we believe will support the land's economic growth.

Exhibit 4

#### Nordrhein-Westfalen's financial performance weakened because of the pandemic, but will recover gradually



2023P - Preliminary data; 2024-25F - Moody's forecast.

Sources: Issuer, German Statistics Office, German Ministry of Finance and Moody's Ratings

#### Very high debt level, some contingent liabilities and social risks from demographics

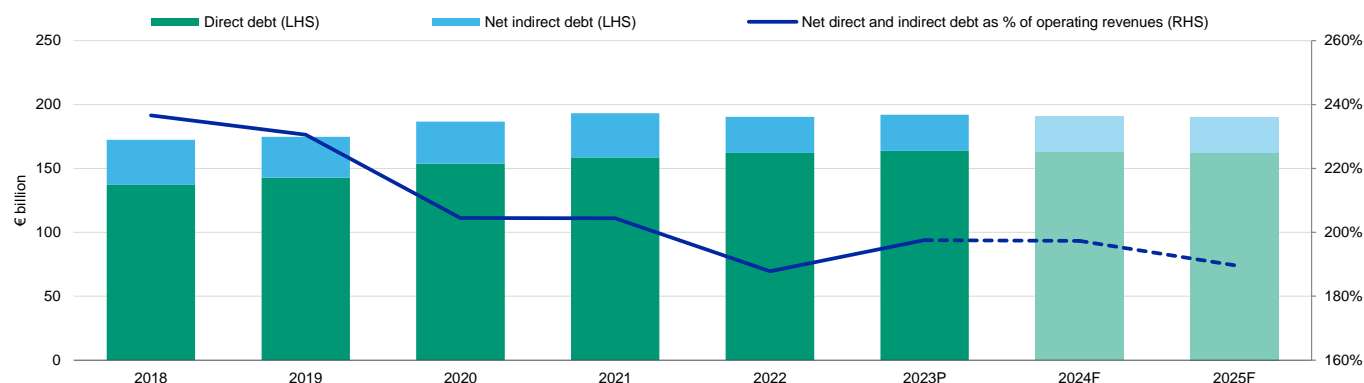
NRW remains committed to a gradual decrease of its very high debt stock which should help contain the increased debt service costs occurred over the last two years. Despite ongoing budgetary pressure we expect a gradual decline of debt levels through 2025. NDID levels will remain rather flat in 2024 at 197% of operating revenues compared to 2023 levels, and decline to 190% in 2025. Reduction of debt burden will be mainly due to slightly growing operating revenues rather than decisive nominal debt reduction.

The land's NDID stood at 198% of operating revenues in 2023, with indirect debt - mainly consisting of guarantees to non-self-supporting public entities - accounting for 29% of the NDID ratio.

Interest expenses rose to 3% of operating revenues in 2023 and are expected to further increase in 2024 before stabilizing at these levels in 2025 (2024F: 4.0%, 2025F: 3.9%), due to the changed interest rate environment and refinancing of maturing low interest rate market funds. Debt service (including debt repayments and interest) accounted for around 16% of the land's total revenue in 2023, which is moderate.

Exhibit 5

### Nordrhein-Westfalen's nominal debt levels set to increase in 2023, followed by marginal declines from 2024



2023P - Preliminary data; 2024-25F - Moody's forecast.

Sources: Issuer, German Statistics Office, German Ministry of Finance, Erste Abwicklungsanstalt and Moody's Ratings

The decrease in the debt burden over the last decade was driven by budget consolidation, mainly through strong tax collection and low interest cost, but also by the winding down of [Erste Abwicklungsanstalt](#) (EAA, Aa1 stable), which is guaranteed by the land and included in its indirect debt. Under the legal framework, EAA's owners, will likely remain liable for any future losses. For both EAA and Portigon, we expect NRW to step in, if needed. This commitment was demonstrated in March 2021, when a decision was taken to increase Portigon's capital by Eur 160 million, fully provided by the land. However, based on the publicly available information, we expect the additional cost for the EAA wind-down, as well as any additional need to step in for Portigon, to be very limited. The land's reserves in this regards stands at Eur 404 million, to cover assumed obligations.

NRW's most significant contingent liability is [NRW.BANK](#) (Aa1/P-1 stable), which provides services to local small and medium-sized enterprises, the public sector and real estate development. The bank is well capitalised, and its regulatory Tier 1 ratio was extremely strong at 44.0% of risk-weighted assets (RWA) as of year-end 2022, which we consider an extraordinarily strong loss-absorption buffer. We deem the entity to be self-supporting. NRW owns and guarantees NRW.BANK.

In line with most other German states, NRW faces social risks due to the demographics of an ageing population. Further, as for most German states, NRW's pension obligations are only partially funded. The land established a pension fund, which we regard as a positive step in addressing the budget impact of its unfunded pension liabilities and rising pension cost. Currently, the pension fund has assets of around Eur 14.7 billion (at YE 2023), but may cover less than 10% of pension obligations. This level of coverage of pension liabilities may be relatively low, but is medium-to-high in the German context.

#### Low revenue and expenditure flexibility

As is the case for all German Länder, Nordrhein-Westfalen has a rigid expenditure structure and limited revenue-raising flexibility. Even if its regional tax base grew above the national average, it would have only a limited effect on the land's budgetary performance. The above-average tax revenue growth would be partly offset by the equalisation system. In general, more than 90% of its revenue stems from shared taxes and transfers, and the German Länder have only limited tax-setting rights.

The tax rates, with very few exceptions, are set at the national level, and some of the expenses are also set and defined at central government level and are not adjustable by the land. Personnel expenses (including pension payments), which account for up to 40% of the land's operating expenses, are adjustable only over a very long period.

#### Extraordinary support considerations

NRW has a very high likelihood of receiving extraordinary support from the federal government, which reflects our assessment of the high reputational risk for Germany as a whole in case of default by a land. Furthermore, under the Bundestreuekonzept, all German Länder must express mutual solidarity in the event that one of them or the Federal Republic faces a severe budgetary crisis. Also, the debt volumes and structure of the German Länder are extremely complex, and an event of nonpayment would be considered to have a corresponding impact on Germany as a whole. The principle of solidarity is firmly entrenched in the Grundgesetz (basic law),

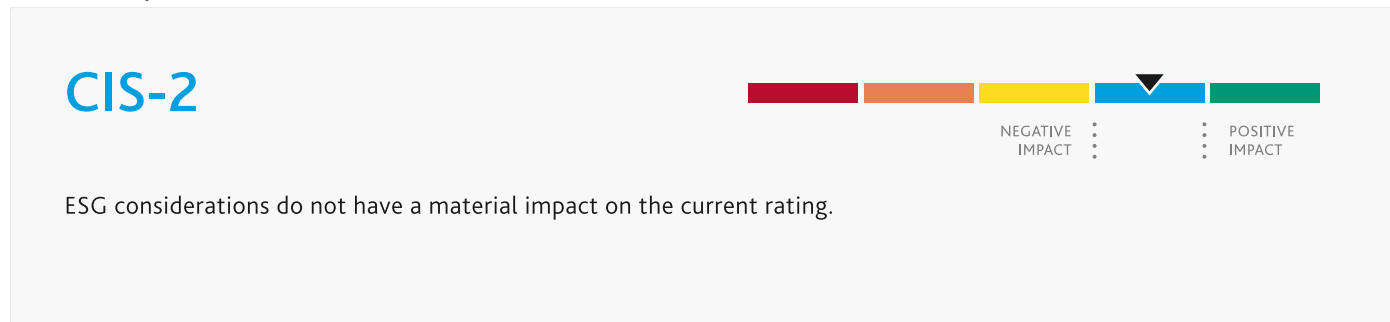
thereby providing a reassurance that, if required, financial support for a member in distress would be forthcoming. We have, therefore, incorporated two notches of uplift, to Aa1 from aa3, into NRW's final rating.

## ESG considerations

### Nordrhein-Westfalen, Land of's ESG credit impact score is CIS-2

Exhibit 6

#### ESG credit impact score



Source: Moody's Ratings

The Land of Nordrhein-Westfalen's ESG Credit Impact Score is neutral-to-low (**CIS-2**), reflecting neutral-to-low exposure to environmental and social risk, along with very strong governance and policy effectiveness that mitigates the region's susceptibility to these risks.

Exhibit 7

#### ESG issuer profile scores



Source: Moody's Ratings

### Environmental

The environmental issuer profile score (**E-2**), reflects risks for most environmental factors, other than physical and climate risk (which scores moderately negative). Nordrhein-Westfalen's economy is well diversified, currently transitioning away from his historical emission intense heavy industry (steel and coal). The land faces physical climate risks, as reflected by the devastating summer floods in some areas of Nordrhein-Westfalen required a budget update during 2021, as well as drought. This could lead in the future to additional spending requirements and negative economic impact (e.g. due to the drought of the Rhine river in 2022 the shipment on it was partly interrupted).

### Social

The social issuer profile score (**S-2**) reflects risks from most social factors, other than health and safety (which scores positive) and demographics (which scores moderately negative). As for Germany overall, the region faces a similar trend of ageing population, resulting in declining labour supply and higher pension and social cost. We view the coronavirus pandemic as a social risk under our ESG framework, given the substantial implications for public health and safety in the region.

### Governance

The governance issuer profile score (**G-1**) reflects the very strong national institutional and governance framework. Budgetary discipline in Germany is a constitutional requirement, which requires each of the regions to maintain structurally balanced budgets. Budget planning in Nordrhein-Westfalen is very prudent, transparent and highly predictable.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.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.

## Rating methodology and scorecard factors

The assigned BCA of aa3 is close to the suggested BCA score of aa2.

For details about our rating approach, please refer to [Rating Methodology: Regional and Local Governments](#), published on May 2024.

Exhibit 8

### Nordrhein-Westfalen, Land of Regional & Local Governments

Baseline Credit Assessment – Scorecard	Score	Value	Sub-factor Weighting	Sub-factor Score	Factor Weighting	Total
<b>Factor 1: Economy</b>					<b>25%</b>	<b>0.88</b>
Regional Income [1]	1.88	62853.07	15%	0.28		
Economic Growth	9.00	baa	5%	0.45		
Economic Diversification	3.00	aa	5%	0.15		
<b>Factor 2: Institutional Framework and Governance</b>					<b>30%</b>	<b>0.90</b>
Institutional Framework	3.00	aa	15%	0.45		
Governance	3.00	aa	15%	0.45		
<b>Factor 3: Financial Performance</b>					<b>20%</b>	<b>0.97</b>
Operating Margin [2]	7.65	9.75%	10%	0.77		
Liquidity Ratio [3]	3.13	22.28%	5%	0.16		
Ease of Access to Funding	1.00	aaa	5%	0.05		
<b>Factor 4: Leverage</b>					<b>25%</b>	<b>2.48</b>
Debt Burden [4]	11.50	193.42%	15%	1.73		
Interest Burden [5]	7.51	3.01%	10%	0.75		
<b>Preliminary BCA Scorecard-Indicated Outcome (SIO)</b>						<b>(5.23) a1</b>
<b>Idiosyncratic Notching</b>						<b>0.0</b>
<b>Preliminary BCA SIO After Idiosyncratic Notching</b>						<b>(5.23) a1</b>
<b>Sovereign Rating Threshold</b>						<b>Aaa</b>
<b>Operating Environment Notching</b>						<b>2.0</b>
<b>BCA Scorecard-Indicated Outcome</b>						<b>(3.23) aa2</b>
<b>Assigned BCA</b>						<b>aa3</b>

[1] Regional GDP per capita in terms of purchasing power parity (PPP) terms, in international dollars

[2] Primary Operating Balance / Operating Revenue

[3] Cash and Cash Equivalents / Operating Revenue

[4] Net Direct and Indirect Debt / Operating Revenue

[5] Interest Payments / Operating Revenue

Source: Moody's Ratings; Fiscal 2023.

## Ratings

Exhibit 9

Category	Moody's Rating
<b>NORDRHEIN-WESTFALEN, LAND OF</b>	
Outlook	Stable
Baseline Credit Assessment	aa3
Issuer Rating	Aa1
Senior Unsecured	Aa1
Other Short Term -Dom Curr	(P)P-1

Source: Moody's Ratings



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