

CREDIT OPINION

23 December 2020

Update

Rate this Research

RATINGS

Alliander N.V.

Domicile	Arnhem, Netherlands
Long Term Rating	Aa2
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

Camille Zwisler, CFA +33.1.5330.3347  
Analyst  
camille.zwisler@moodys.com

Laura Braeckman +33.1.5330.3362  
Associate Analyst  
laura.braeckman@moodys.com

Andrew Blease +33.1.5330.3372  
Associate Managing Director  
andrew.blease@moodys.com

Alliander N.V.

Update to credit analysis

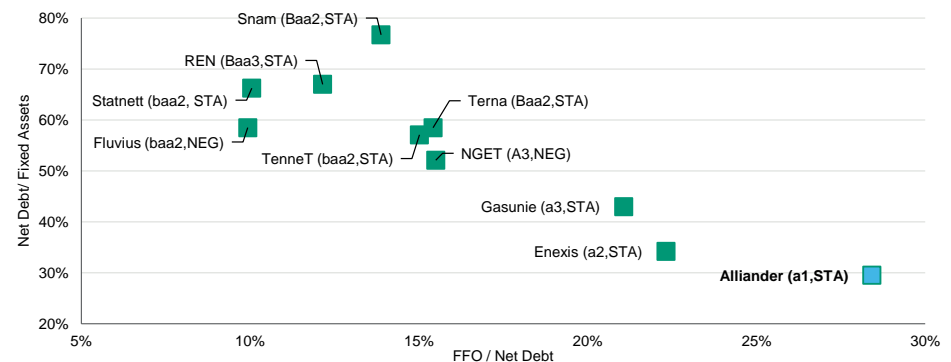
Summary

Alliander N.V. (Alliander, Aa2 stable)'s credit quality is underpinned by (1) its low business risk as the monopoly provider of electricity and gas distribution network services within its service area; (2) stable and predictable cash flows, generated under a well-established and transparent regulatory framework; and (3) its strong financial profile, with very modest leverage (as measured by Net Debt / Fixed Assets) compared to other European networks.

However, Alliander's credit quality is impacted by the expected weakening of cash flow metrics (excluding one-offs) over the remainder of the current regulatory period, which ends in December 2021, reflecting (1) further declines in regulatory allowed returns over this period; and (2) growing capital spending, primarily related to facilitating delivery of the country's ambitious energy transition objectives. While 2020 cash flow metrics will be negatively affected by a one-off related to the increase in transmission grid costs, which will be recovered in 2022, we expected 2021 cash flow metrics to recover slightly as these additional costs are added to the tariff.

Exhibit 1

Very modest leverage, compared to other European networks, supports strong standalone credit quality



(1) Ratings are the standalone credit quality, expressed as assigned final rating or Baseline Credit Assessment where applicable; (2) Net debt / Regulated Asset Base (RAB) rather than Net debt / Fixed Assets is used for NGET = National Grid Electricity Transmission plc (A3 negative) (3) Financial metrics shown correspond to the latest full-year adjusted financial metrics  
Source: Moody's Investors Service

Alliander's Aa2 rating incorporates two-notches of uplift from its stand-alone credit quality, reflecting the strong probability of extraordinary financial support being provided its owners, the largest of which is the Province of Gelderland with a 45% shareholding, if this was ever needed.

## Credit strengths

- » Low business risk of monopoly distribution network activities, with limited contribution from unregulated businesses
- » Stable and transparent regulatory regime
- » Strong financial profile, with very modest leverage (as measured by Net Debt / Fixed Assets) compared to the wider peer group
- » Expectation of strong support from local government shareholders, given the essentiality of assets and the key role the company will play in facilitating the energy transition in its service area

## Credit challenges

- » Reductions in allowed returns have reduced financial flexibility
- » Increased capital spending requirements to support the country's energy transition will increase leverage and may weaken the business risk profile of the group if it results in material growth in unregulated activities, e.g. heating networks
- » Stranded asset risk faced by gas networks in the context of the energy transition, although the regulator is considering options to alleviate this
- » Continued low interest rate environment will likely lead to a further material reduction in allowed returns in the next regulatory period (commencing January 2022), depressing cash flow based metrics, under the ACM's current approach to setting allowed returns

## Rating outlook

The stable outlook reflects our expectation that Alliander will continue to derive the vast majority of its earnings and cash flows from low-risk regulated activities and maintain a financial profile in line with our minimum guidance for the current rating.

## Factors that could lead to an upgrade

An upgrade of the final rating is considered unlikely at this stage, taking into account the expected modest weakening in Alliander's financial profile as a result of decreasing allowed returns during the current regulatory period and the increase in capital spending requirements intended to facilitate the energy transition. Over the long term, upward pressure for the rating would develop if:

- » the growth capex programme is substantially complete;
- » Alliander continues to derive the vast majority of its earnings from monopoly activities governed by a well-developed and stable regulatory framework; and
- » Alliander exhibits improved cash flow based metrics, expressed as funds from operations (FFO) / Net Debt comfortably above the mid-thirties and retained cash flow (RCF) permanently in the high-twenties, both in percentage terms.

## Factors that could lead to a downgrade

Downward rating pressure would arise if:

- » Alliander failed to maintain the following minimum credit metrics: FFO / Net Debt above 25% on a sustainable basis and Net Debt / Fixed Assets below the low forties in percentage terms; or
- » there was a material increase in the proportion of earnings from unregulated activities, for example heat, as Alliander facilitates delivery of the energy transition; or

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

- » there was a deterioration in either our assessment of the credit quality of Alliander's local government shareholders or the likelihood of them providing extraordinary support to the company.

## Key indicators

Exhibit 2

### Alliander N.V.

	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	LTM Jun-20
FFO Interest Coverage	7.7x	8.4x	9.7x	11.9x	12.7x	12.3x
Net Debt / Fixed Assets	29.2%	27.9%	29.8%	28.1%	29.5%	33.9%
FFO / Net Debt	26.3%	25.1%	25.5%	30.4%	28.4%	21.9%
RCF / Net Debt	19.4%	20.1%	20.1%	25.1%	21.5%	17.5%

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

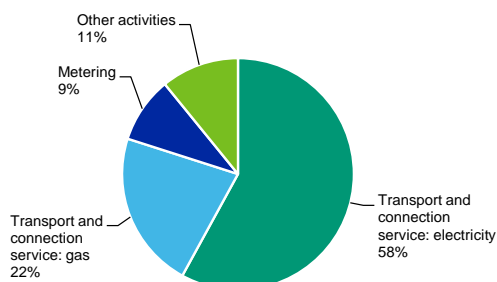
Source: Moody's Financial Metrics™

## Profile

Alliander N.V. owns and manages low and medium voltage electricity and gas distribution networks in the Dutch provinces of Gelderland, Noord-Holland, Flevoland and large parts of, Friesland and Zuid-Holland. The company is the largest electricity and gas network operator in the Netherlands with approximately 3.2 million electricity and 2.5 million gas connections, covering around 35% of the Netherlands. The vast majority of Alliander's revenues come from its regulated activities (Liander network activities).

Exhibit 3

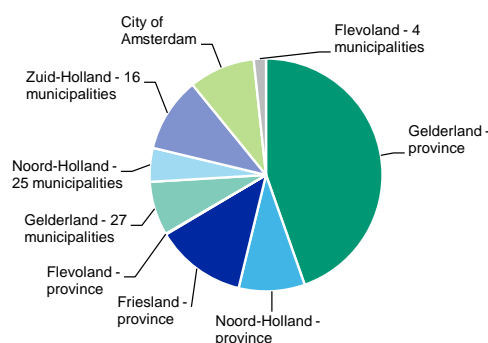
### Revenue breakdown by segment (LTM ending June 2020)



Source: Alliander, Moody's Investors Service

Exhibit 4

### Dutch provinces own the majority of Alliander's shares Breakdown in voting right



Source: Alliander, Moody's Investors Service

The company is fully owned by Dutch provinces and municipalities, with the largest stakes held by the provinces of Gelderland (44.68%), Friesland (12.65%) and Noord-Holland (9.16%), and the City of Amsterdam (9.16%). The remaining 24% share is owned by 73 small municipalities where Alliander provides its network services.

## Detailed credit considerations

### Low business risk, underpinned by regulated cash flow

Alliander's core business activities relate to low-risk monopoly network operation. These activities contribute over 85% of Alliander's revenues and provide relatively stable and predictable cash flow under a well-established and transparent regulatory framework.

Alliander's remaining revenue largely relates to services offered to customers with regulated network activities, such as network service, maintenance and operations for regulated monopolies, and are carried out through Qirion. Whilst these business are non-regulated they are strongly linked to Alliander's core business.

We expect the proportion of non-regulated cash flows to increase in the 2020s with the likely growth in heating networks to facilitate the energy transition (new heating systems will be needed for 1.5 million houses in the Netherlands by 2030 under the Climate Agreement, discussed below), absent a regulatory framework being put in place for these activities.

### Established regulatory framework, but returns continue to decline

The Dutch regulatory framework, applied since 2000 and 2001 for electricity and gas networks, respectively, allows the country's distribution network companies to earn a return on their regulated asset base and provides allowances for costs adjusted for Consumer Price Index inflation and an efficiency incentive factor. The regulation incorporates incentives determined using a "yardstick" mechanism, which defines the cost efficiency and quality factors based on industry averages and encourages network companies to improve profitability by outperforming the sector. This approach is typical among regulatory regimes in Europe, and we believe that the application by the Dutch regulator, the Authority for Consumers and Markets (ACM), has been transparent and consistent to date.

The current regulatory period for both electricity and gas distribution runs from January 2017 to December 2021. The Method Decisions, the ACM's final determination, were published in September 2016 and originally included a gradual reduction in the allowed return (weighted average cost of capital [WACC]) to 3.0% from 4.3% in 2016 (both pretax, real) by 2021. Following successful appeals from Distribution System Operators (DSOs), new Method Decisions were published in January 2019, with the average WACC unchanged over the period but starting and finishing 20 basis points higher and lower, respectively. The Dutch network operators appealed the decision to lower the 2021 WACC and the appeal body College van Beroep voor het bedrijfsleven (Cbb), ruled in December 2019 that the 2021 WACC in the original Method Decision should apply<sup>1</sup>.

Exhibit 5

#### Allowed return for Dutch network operators shows a declining trend

WACC - Dutch DSOs	2008-2010	2011-2013	2014-2016	2017	2018	2019	2020	2021
risk free rate	4.00%	3.95%	2.50%	2.27%	2.03%	1.80%	1.56%	1.33%
risk premium	0.80%	1.50%	1.20%	0.91%	0.88%	0.86%	0.83%	0.81%
transaction costs	0.00%	0.00%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%
<b>Nominal Cost of Debt</b>	<b>4.80%</b>	<b>5.45%</b>	<b>3.85%</b>	<b>3.32%</b>	<b>3.06%</b>	<b>2.81%</b>	<b>2.55%</b>	<b>2.29%</b>
nominal risk free rate for CoE	4.00%	3.95%	2.50%	1.28%	1.28%	1.28%	1.28%	1.28%
market risk premium	5.00%	5.00%	5.00%	5.05%	5.05%	5.05%	5.05%	5.05%
asset beta	0.41	0.42	0.35	0.44	0.43	0.43	0.42	0.42
equity beta	0.86	0.81	0.61	0.77	0.76	0.76	0.75	0.74
<b>Nominal Cost of Equity</b>	<b>8.30%</b>	<b>8.00%</b>	<b>5.55%</b>	<b>5.18%</b>	<b>5.14%</b>	<b>5.10%</b>	<b>5.06%</b>	<b>5.02%</b>
gearing assumption	60%	55%	50%	50%	50%	50%	50%	50%
tax rate	25.5%	25.5%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
<b>Nominal WACC pre-tax</b>	<b>7.3%</b>	<b>7.8%</b>	<b>5.63%</b>	<b>5.11%</b>	<b>4.96%</b>	<b>4.80%</b>	<b>4.65%</b>	<b>4.49%</b>
inflation	1.75%	1.55%	2.00%	0.90%	1.03%	1.16%	1.29%	1.42%
<b>Real WACC pre-tax</b>	<b>5.5%</b>	<b>6.2%</b>	<b>3.6%</b>	<b>4.2%</b>	<b>3.9%</b>	<b>3.6%</b>	<b>3.4%</b>	<b>3.0%</b>

(1) The WACC for 2021 corresponds to the original Method Decisions published in 2016, following the Cbb ruling of December 2019; (2) The calculation for 2017-20 corresponds to a straight-line extrapolation between the 2016 WACC (Amended Method Decisions) and the 2021 WACC (Original Method Decisions).

Source: ACM, Moody's Investors Service

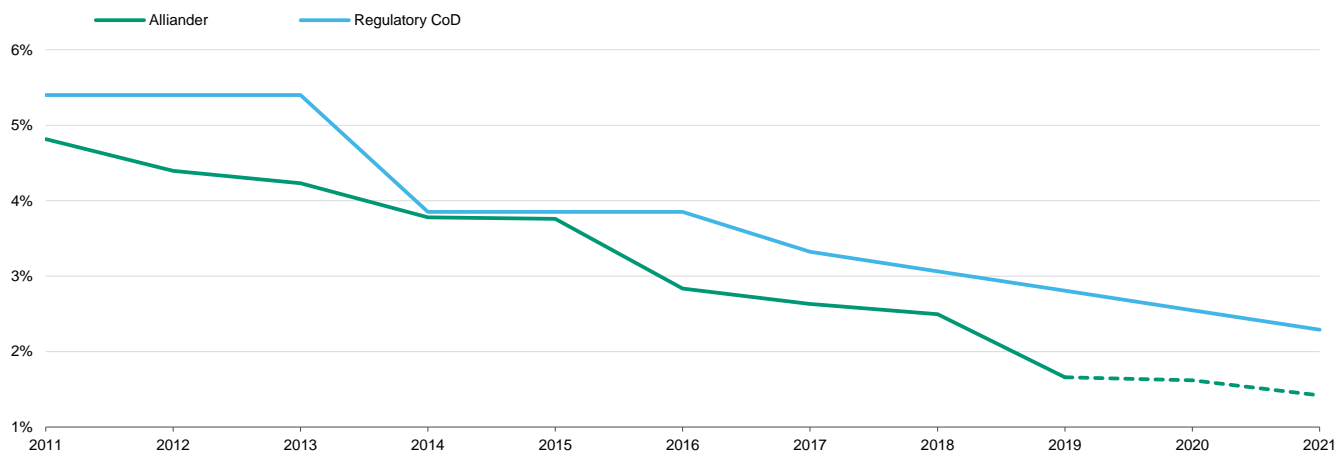
The reduction in allowed returns is less material than for the 2014-16 regulatory period, during which it fell to 3.6% from 6.2% (both pretax, real) in linear steps. Alliander has demonstrated its ability to operate within the bounds of the regulatory return allowance and to fund comfortably within the cost of debt assumed by the regulator. We expect Alliander's cost of external debt to remain within the allowed cost for the period, supported by ongoing refinancing and new funding for its investment programme.

Alliander has significantly reduced its average cost of debt following the refinancing of its €300 million, 4.5% December 2019 maturity through the issuance of a €300 million, 0.875% green bond in June 2019. It has since issued a €500 million, 0.375% green bond in June 2020 to finance its capital expenditure programme. The next two most expensive pieces of long-term debt mature in November

2022 (€400 million with a 2.25% coupon) and June 2024 (€400 million with a 2.875% coupon) which will help mitigate the further anticipated step-down in cost of debt in the next regulatory period.

Exhibit 6

**We expect Alliander to continue to outperform the regulatory cost of debt allowance over the remainder of the current regulatory period (all figures in nominal terms)**



(1) Transaction costs excluded (regulatory cost of debt allowance has included a 15 basis points per annum for these in both the current and prior regulatory period); (2) Alliander's actual cost of debt based on interest on loans from thirds parties, i.e. excluding lease obligations, including 50% of the hybrid securities (reported as equity in the financial statements).

Source: ACM, Alliander, Moody's Investors Service

The regulator also imposes a series of cost-efficiency targets on the networks, which, combined with the allowed return, determine the so-called X-factor, currently set at 1.9% for electricity and 1.42% for gas annually for Alliander (the lowest for both fuels amongst the DSOs; 2.07% and 1.61% were the unweighted sector average for electricity and gas respectively). While base costs were reset on the basis of average efficient costs in the 2013-15 period, resulting in an increase in the overall revenue allowance for 2017-21, the forward-looking operating efficiency targets embedded in the X-factor may still prove difficult to achieve.

### Environmental considerations: National energy transition plan raises capital spending and brings challenges for the next regulatory period

The Netherlands has committed to ambitious climate change targets for 2020, including a 16% reduction in greenhouse gas emissions, compared with the 2005 levels, and 14% of gross final energy consumption from renewable energy. Progress has been slow and the Netherlands shows the largest gap between actual and planned renewable energy development in the European Union, with an actual share of renewables of 7.4% for 2018, compared with an indicative trajectory of 9.9%.

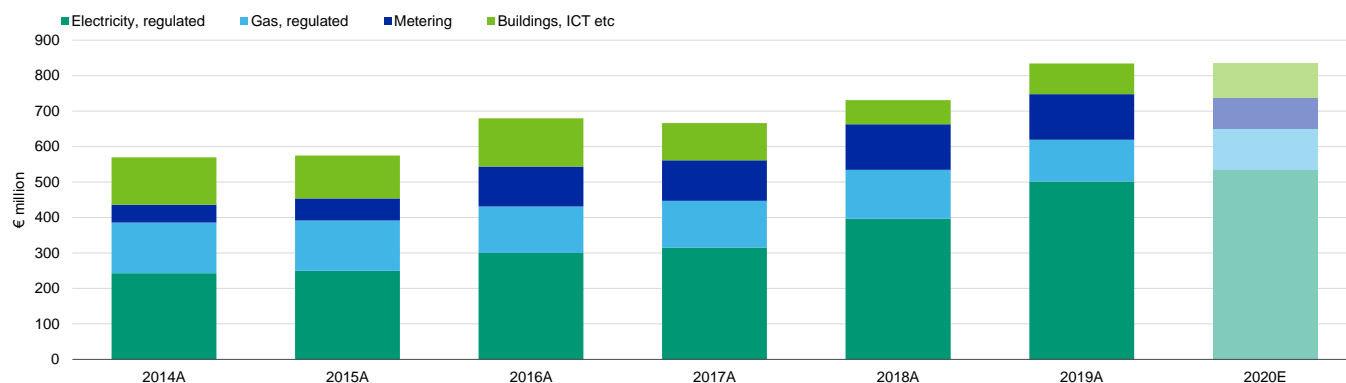
In June 2019, the Dutch Government adopted the Dutch Climate Agreement which commits the Netherlands to (1) a 49% reduction in CO<sub>2</sub> emissions (relative to 1990 levels) and the generation of 70% of electricity by renewable energy sources by 2030; and (2) a 95% reduction in CO<sub>2</sub> emissions (relative to 1990 levels) and the generation of all electricity carbon neutrally by 2050.

Delivering these targets will require a significant acceleration of the energy transition across many areas that would result in material incremental capital spending for Alliander in the 2020s, including new connections for local renewable generation (primarily solar and onshore wind), reinforcing the grid to cope with the growth in electric vehicles and heat transition.

Alliander believes the main challenge is to keep up with the pace of the energy transition. There is already a material shortage of qualified engineers in the sector and the shortage of grid capacity has led to some delay in connecting renewables to the grid.

Consequently, we expect the energy transition will result in further material increases in Alliander's capital spending programme which has grown appreciably since 2015, from around €570 million per annum (gross of customer contributions) to over €800 million in 2019 primarily due to the smart meter roll-out that started in 2015 and increased demand for connection to the electricity grid. While capital spending for smart meters will decrease from 2021 as the smart-meter roll-out programme will be substantially completed by the end of 2020, we expect an annual increase in capital spending of c.€70 million on average over the next 5 years.

Exhibit 7

**Alliander's capital spending will continue to increase to support the country's energy transition**

Note: The 2020 forecast corresponds to the company's target at year-end 2020 published in its half-year 2020 report

Source: Alliander, Moody's Investors Service

**Regulator considers options to mitigate stranded asset risk for the gas network**

As illustrated by the cancellation of the requirement to provide compulsory gas connections to new residential areas, the Netherlands is moving away from natural gas towards more sustainable sources of energy, which raises the risk of stranded assets for gas networks. The ACM is considering its impact on gas networks' allowed revenue for the 2022-26 regulatory period through the Morgan project. In its Draft Method Decisions for the period 2022-26 for Gas Transport Services (GTS) (the Dutch gas transport operator owned by [N.V. Nederlandse Gasunie](#), A1 stable), the ACM proposed several changes in order to bring forward the receipt of cash flow.<sup>2</sup> These changes include (1) the move to a nominal allowed return from a real allowed return, (2) accelerating depreciation of GTS's Regulated Asset Base, and (3) immediate depreciation of divested assets. The regulator has not yet commented on whether these changes would apply to gas distribution or electricity.

In parallel, the ACM is conducting analyses on the alternative uses of the gas network, such as green gas and hydrogen.

The country is contemplating developing its district heating infrastructure. While the activity does not benefit from a similar regulatory framework as electric or gas networks, some Dutch network operators such as Alliander could decide to have a role in its operation.

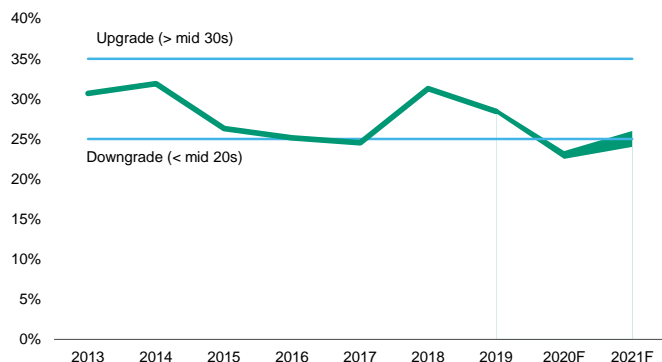
**Very modest leverage, compared with peers, supports strong standalone credit quality**

Like its closest peer [Enexis Holding N.V.](#) (Aa3 stable), Alliander exhibits a strong financial profile with very modest financial leverage compared with the wider European peer group of energy network companies (see exhibit 1). Over the coming years, we expect Alliander's financial profile to weaken, with the reduction in allowed returns (itself a reflection of the continued low interest rate environment) and increasing investment requirements to support delivery of the country's energy transition.

Nevertheless, overall leverage will remain modest in the wider European context. Due to higher transmission grid costs, we forecast Alliander will maintain FFO / Net Debt at or slightly below 25% and Net Debt / Fixed Assets around 30-35% until the end of the current regulatory period. The robust financial profile is also supported by a prudent dividend policy, with a payout ratio of around 45%.

Exhibit 8

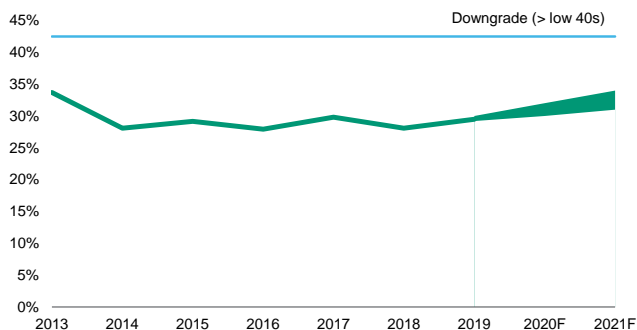
**We expect cash-flow based metrics to weaken due to lower allowed returns, higher TenneT charges and capital expenditure FFO / net debt against ratio guidance for the a1 BCA**



Moody's forecasts represent Moody's view, not the view of the issuer  
Source: Moody's Investors Service

Exhibit 9

**but Alliander will maintain very modest level of leverage Net debt / Fixed assets against ratio guidance for the a1 BCA**



Moody's forecasts represent Moody's view, not the view of the issuer  
Source: Moody's Investors Service

Cash-flow based metrics for 2020 have been negatively affected by the one-off increase in transmission grid costs from TenneT TSO B.V.'s (TenneT, the national electricity transmission system operator owned by [TenneT Holding B.V.](#), A3 stable), which amounted to €25 million in the first half of 2020. Increased costs for 2020 will be passed through consumers, although with a two-year lag. Our ratio guidance for Alliander is based on underlying not reported metrics. Dutch electricity DSOs have been allowed to include a new estimate of transmission grid costs in their 2021 tariffs and hence the impact on Alliander's 2021 financial metrics should be minimal. The revenue allowance for the next regulatory period will include an updated value for the transmission grid costs.

### Final rating incorporates two notches of rating uplift

Given its 100% ownership by Dutch provinces and municipalities, Alliander falls within the scope of our [Government-Related Issuers](#) rating methodology, published in February 2020.

Alliander's Aa2 rating incorporates a two-notch uplift from its stand-alone credit quality, expressed as a baseline credit assessment (BCA) of a1, reflecting a strong probability of extraordinary financial support being provided by its owners, if ever required, the largest of which is the Province of Gelderland with around 45%. Although ownership of Alliander is relatively fragmented among 77 provinces and municipalities, our assumption of strong support reflects (1) the importance of Alliander's network operations for the regional economy; (2) the fact that the four largest provinces together hold 76% of the company's shares; and (3) the strong governance framework in the Netherlands with oversight by the national government.

Our assessment of very high default dependence reflects Alliander's significant exposure to the Dutch economy, as almost all of the company's revenues and cash flows are generated from domestic activities.

In addition, the Dutch government's ambitious decarbonisation agenda increases the strategic importance of Alliander to its owners, as the central government increasingly sees municipalities as partners in the energy transition.

### Low exposure to the impact from the coronavirus pandemic

Measures to counter the spread of the virus have resulted in lower-than-expected electricity consumption in 2020, which resulted in lower network load (distribution volumes) and hence lower collected revenue for network activities for most European regulated networks. However, regulated networks benefit from regulatory protections against reduced consumption. In the case of Dutch DSOs, their exposure to volume risk is small because revenue is mostly based on capacity rather than volume.

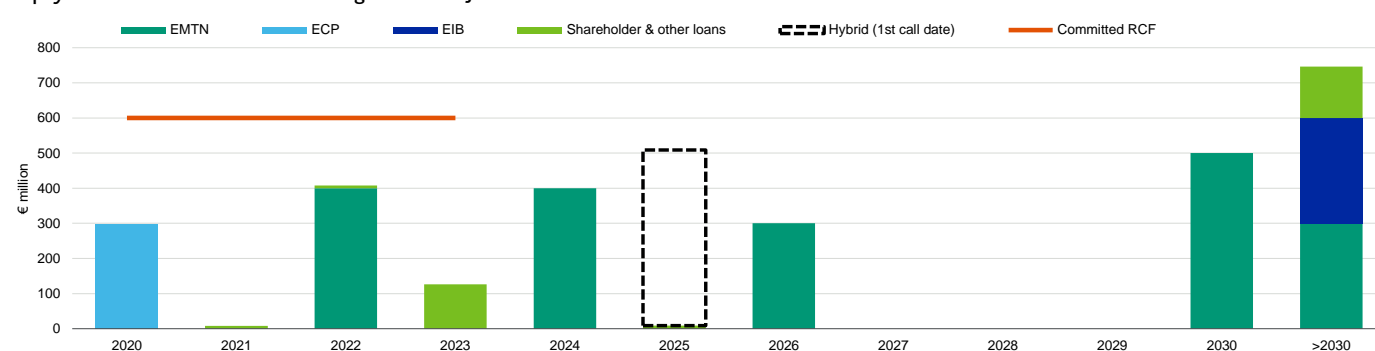
Government restrictions, self-isolation and higher levels of staff sickness may delay the planned delivery of network operators' investment programmes. However, we expect the impact to be small for Alliander, taking into consideration the moderate restrictions imposed by the Dutch government on construction work.

## Liquidity analysis

We assess Alliander's liquidity position as strong over the period to December 2021. Alliander's principal sources of liquidity include (1) the strong and predictable cash flow generated from its regulated network activities (around €1 billion over January - December 2021 we estimate); (2) its sizeable cash and cash equivalents balance, €468 million as of 30 June 2020; and (3) its committed €600 million revolving credit facility, fully undrawn as of 30 June 2020, maturing in July 2023. We believe these sources will be sufficient to cover dividend and capex requirements totalling around €1 billion in 2021. Alliander benefits from a well-spread debt maturity profile, see exhibit 10, reducing refinancing risk.

Exhibit 10

### Alliander has a well-spread debt maturity profile with most expensive embedded debt all maturing by 2024



Note: Excludes €228 million in lease obligations

Source: Alliander, Moody's Investors Service

Alliander has exposure to contingent liabilities represented by three cross-border leasing (CBL) arrangements. In the case of an unscheduled early termination of all of these CBLs at the same time this could give rise to a total exposure (maximum strip risk) of US \$68 million as of 30 June 2020. According to the conditions of some of the CBLs, the company would need to post additional letters of credit if its ratings were to drop below certain minimum levels. We note that the company can access its €600 million revolving credit facility to cover potential financing needs stemming from the CBLs.

## Methodology and scorecard

Alliander is rated in accordance with the rating methodologies for [Regulated Electric and Gas Networks](#), published in March 2017, and [Government-Related Issuers](#), published in February 2020.

Exhibit 11

### Rating factors

Alliander N.V.

	Current 12/31/2019		Moody's 12-18 Month Forward View As of December 2020 [3]	
Regulated Electric and Gas Networks Industry Grid [1][2]	Measure	Score	Measure	Score
<b>Factor 1 : Regulatory Environment and Asset Ownership Model (40%)</b>				
a) Stability and Predictability of Regulatory Regime	Aa	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Ability and Timeliness)	A	A	A	A
d) Revenue Risk	Aa	Aa	Aa	Aa
<b>Factor 2 : Scale and Complexity of Capital Program (10%)</b>				
a) Scale and Complexity of Capital Program	Baa	Baa	Baa	Baa
<b>Factor 3 : Financial Policy (10%)</b>				
a) Financial Policy	A	A	A	A
<b>Factor 4 : Leverage and Coverage (40%)</b>				
a) FFO Interest Coverage (3 Year Avg)	11.4x	Aaa	14x - 17x	Aaa
b) Net Debt / Fixed Assets (3 Year Avg)	29.5%	Aaa	30% - 35%	Aa
c) FFO / Net Debt (3 Year Avg)	28.4%	Aa	23% - 26%	A
d) RCF / Net Debt (3 Year Avg)	22.1%	Aa	18%-23%	A
<b>Rating:</b>				
a) Scorecard-indicated Outcome from Grid		Aa3		A1
b) Actual BCA Assigned				a1
<b>Government-Related Issuer</b>				<b>Factor</b>
a) Baseline Credit Assessment				a1
b) Government Local Currency Rating				n/a
c) Default Dependence				Very High
d) Support				Strong
e) Final Rating Outcome				Aa2

Note: [1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations; [2] As of 31 December 2019; [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 <sup>TM</sup>

## Ratings

Exhibit 12

Category	Moody's Rating
<b>ALLIANDER N.V.</b>	
Outlook	Stable
Issuer Rating	Aa2
Senior Unsecured -Dom Curr	Aa2
Jr Subordinate -Dom Curr	A2
ST Issuer Rating	P-1

Source: Moody's Investors Service

## Appendix

Exhibit 13

## Peer comparison table

(in EUR millions)	Alliander N.V.			Enexis Holding N.V.			Fingrid Oyj			N.V. Nederlandse Gasunie			Gas Networks Ireland		
	Aa2 Stable (a1 BCA)			Aa3 Stable (a2 BCA)			A1 Stable (a2 BCA)			A1 Stable (a3 BCA)			A3 Positive (a3 BCA)		
	FYE Dec-17	FYE Dec-18	FYE Dec-19	FYE Dec-17	FYE Dec-18	FYE Dec-19	FYE Dec-17	FYE Dec-18	FYE Dec-19	FYE Dec-17	FYE Dec-18	FYE Dec-19	FYE Dec-17	FYE Dec-18	FYE Dec-19
Revenue	1,797	1,920	1,930	1,398	1,445	1,491	672	853	789	1,241	1,251	1,278	\$473	487	470
EBITDA	658	753	755	725	760	742	269	300	241	793	777	898	\$311	307	291
Total Debt	2,166	2,156	2,376	2,571	2,395	2,696	1,110	1,085	1,120	3,787	3,841	3,807	\$1,412	1,355	1,267
Net Debt	2,066	2,017	2,224	2,285	2,364	2,634	1,026	1,000	1,037	3,746	3,814	3,762	\$1,361	1,238	1,165
Net Property Plant and Equipment	6,925	7,182	7,539	7,040	7,318	7,704	1,702	1,653	1,675	8,600	8,669	8,758	\$2,578	2,577	2,549
FFO Interest Coverage	9.4x	12.2x	12.7x	10.0x	9.9x	11.3x	13.2x	15.0x	14.1x	8.9x	8.8x	9.0x	12.0x	12.1x	13.5x
Net Debt / Fixed Assets	29.8%	28.1%	29.5%	32.5%	32.3%	34.2%	60.3%	60.5%	61.9%	43.6%	44.0%	43.0%	52.8%	48.1%	45.7%
FFO / Net Debt	24.5%	31.3%	28.4%	24.8%	25.0%	22.3%	21.5%	24.2%	18.6%	19.0%	16.9%	21.1%	18.9%	20.3%	20.8%
RCF / Net Debt	19.1%	25.9%	21.5%	20.2%	20.6%	17.7%	11.9%	6.9%	2.0%	16.0%	10.1%	15.0%	15.4%	16.3%	16.1%

Source: Moody's Financial Metrics™. All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months. RUR\* = Ratings under Review, where UPG = for upgrade and DNG = for downgrade.

FYE = Financial Year-End. LTM = Last Twelve Months. All figures are calculated using Moody's estimates and standard adjustments.

Source: Moody's Financial Metrics™

Exhibit 14

## Debt adjustment breakdown

## Alliander N.V.

(in EUR Millions)	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-19	LTM Jun-20
<b>As Reported Total Debt</b>	<b>1,830.0</b>	<b>1,732.0</b>	<b>1,934.0</b>	<b>1,955.0</b>	<b>2,288.0</b>	<b>3,015.0</b>
Leases	112	104	132	110	0	0
Hybrid Securities	248	248	248	248	248	248
Non-Standard Adjustments	-162	-168	-148	-156	-160	-160
<b>Moody's-Adjusted Debt</b>	<b>2,028.0</b>	<b>1,916.0</b>	<b>2,165.7</b>	<b>2,156.2</b>	<b>2,375.5</b>	<b>3,102.5</b>
Cash & Cash Equivalents	-114	-63	-100	-139	-152	-468
<b>Moody's Adjusted Net Debt</b>	<b>1,914.0</b>	<b>1,853.0</b>	<b>2,065.7</b>	<b>2,017.2</b>	<b>2,223.5</b>	<b>2,634.5</b>

FYE = Financial Year-End. LTM = Last Twelve Months

All figures are calculated using Moody's estimates and standard adjustments

Source: Moody's Financial Metrics™

Exhibit 15

## FFO adjustment breakdown

## Alliander N.V.

(in EUR Millions)	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-19	LTM Jun-20
<b>As Reported Funds from Operations (FFO)</b>	<b>473</b>	<b>353</b>	<b>496</b>	<b>630</b>	<b>652</b>	<b>590</b>
Leases	25	23	19	18	0	0
Hybrid Securities	-8	-8	-8	-5	-4	-4
Alignment FFO	2	72	0	-12	-16	-8
Non-Standard Adjustments	12	26	0	0	0	0
<b>Moody's Adjusted Funds from Operations (FFO)</b>	<b>503</b>	<b>465</b>	<b>507</b>	<b>631</b>	<b>632</b>	<b>578</b>

FYE = Financial Year-End. LTM = Last Twelve Months

All figures are calculated using Moody's estimates and standard adjustments

Source: Moody's Financial Metrics™

Exhibit 16

## Selected historical adjusted financials

Alliander N.V.

(in EUR Millions)	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18	FYE Dec-19	LTM Jun-20
<b>Income Statement</b>						
Revenue	1,540	1,584	1,797	1,920	1,930	1,968
% Change In Sales (Yoy)	-3.4%	2.9%	13.4%	6.8%	0.5%	2.5%
EBITDA	634	559	658	753	755	716
EBITDA Margin %	41.2%	35.3%	36.6%	39.2%	39.1%	36.4%
EBIT	335	213	314	396	383	340
EBIT Margin %	21.8%	13.5%	17.5%	20.6%	19.8%	17.3%
Interest Expense	76	63	60	56	54	51
Net Income	243	279	195	250	254	224
<b>Balance Sheet</b>						
Cash & Cash Equivalents	114	63	100	139	152	468
Current Assets	406	400	517	555	547	1,035
Net Property Plant And Equipment	6,565	6,633	6,925	7,182	7,539	7,777
Non-Current Assets	7,373	7,439	7,684	7,900	8,241	8,505
Total Assets	7,838	7,839	8,201	8,455	8,791	9,543
Current Liabilities	997	584	762	873	799	816
Gross Debt	2,028	1,916	2,166	2,156	2,376	3,103
Non-Current Liabilities	3,307	3,639	3,745	3,700	4,016	4,780
Total Liabilities	4,399	4,223	4,507	4,573	4,815	5,596
Total Equity	3,439	3,616	3,694	3,882	3,977	3,948
Total Liabilities & Equity	7,838	7,839	8,201	8,455	8,791	9,543
<b>Cash Flow</b>						
Funds From Operations (FFO)	503	465	507	631	632	578
Cash Flow From Operations (CFO)	529	390	465	651	634	600
Capital Expenditures	-515	-604	-589	-623	-730	-715
Retained Cash Flow (RCF)	371	373	395	523	478	460
Free Cash Flow (FCF)	-118	-306	-236	-80	-250	-233
FFO / Net Debt	26.3%	25.1%	24.5%	31.3%	28.4%	21.9%
RCF / Net Debt	19.4%	20.1%	19.1%	25.9%	21.5%	17.5%
FCF / Net Debt	-6.2%	-16.5%	-11.4%	-4.0%	-11.2%	-8.8%
<b>Interest Coverage</b>						
(FFO + Interest) / Interest Expense	7.7x	8.4x	9.4x	12.2x	12.7x	12.3x
<b>Leverage</b>						
Debt / EBITDA	3.2x	3.4x	3.3x	2.9x	3.1x	4.3x
Debt / Book Capitalization	37.1%	34.6%	36.9%	35.7%	37.4%	43.9%

FYE = Financial Year-End. LTM = Last Twelve Months

All figures are calculated using Moody's estimates and standard adjustments.

Source: Moody's Financial Metrics™

## Endnotes

- [1 CBB Method decisions 2017-2021 WACC - Reformatio in peius](#), published 12 December 2019.
- [2 N.V. Nederlandse Gasunie: Draft Method Decisions will increase cash flow for Gasunie in 2022, despite cut in returns](#), 12 October 2020

© 2020 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 INVESTORS SERVICE, INC. AND/OR ITS CREDIT RATINGS AFFILIATES ARE MOODY'S 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 BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S INVESTORS SERVICE 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 MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S INVESTORS SERVICE 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 PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS 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 PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS 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 ITS PUBLICATIONS 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 PUBLICATIONS 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 PUBLICATIONS 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.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS 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 rating process or in preparing its Publications.

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 to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service 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 and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moody.com](http://www.moody.com) under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

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 Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.