

## **CREDIT OPINION**

5 July 2019

# Update



Rate this Research

#### RATINGS

#### Avinor AS

Domicile	Norway
Long Term Rating	A1
Туре	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the <u>ratings section</u> 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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# **Avinor AS**

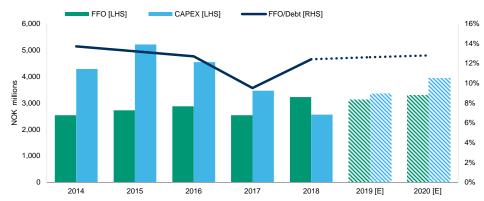
# Annual update

## **Summary**

The credit quality of Avinor AS (Avinor, A1 stable) positively reflects (1) the company's strong business profile, which is underpinned by its near-monopoly position and modest transmodal competition for medium-long distance travel within Norway; (2) a supportive strategic framework established by the State, highlighting the importance of Avinor's operations to achieve societal objectives; (3) a high share of origin and destination traffic, although this is concentrated amongst a small number of airlines; (4) the company's conservative financial policy; and (5) uplift to the standalone credit profile (baseline credit assessment, or BCA, of baa1) to reflect the likelihood of extraordinary support provided by the <u>Government of Norway</u> (Aaa stable) in the event that this would be required to avoid a default.

However, Avinor's credit quality also reflects the following challenges: (1) its exposure to Norway's economy, which is heavily reliant on natural resources, and in turn can result in some volatility of macroeconomic indicators, thus negatively impacting Avinor's revenue growth; (2) the weak profile of its main carriers; and (3) a significant capital expenditure programme which entails investment of approximately NOK26.7 billion over the period 2019-24.

Exhibit 1
Good cash flow generation supports Avinor's credit metrics but investment requirements remain sizeable



Note: This represents Moody's forward view, not the view of the issuer. Based on 'Adjusted' financial data. 2017 FFO includes one-off costs related to transfer of pension liabilities to Avinor.

Source: Company, Moody's Investors Service

# **Credit Strengths**

- » Monopolistic position and modest transmodal competition
- » Supportive strategic framework underpinned by government policy
- » High share of origin and destination traffic
- » Conservative financial policy
- » Likelihood of extraordinary support from the Government of Norway

# **Credit Challenges**

- » Exposure to Norway's economic environment, which can negatively impact revenue growth
- » Some airline concentration
- » Weak credit profile of the main carriers operating at Avinor airports
- » Significant capital expenditure programme

# **Rating Outlook**

The stable outlook assigned to the rating reflects the near monopoly position of Avinor and the strategic importance of its airport and air navigation operations to Norway, as well as the expectation that its financial profile will remain in line with the minimum guidance for the current rating.

# Factors that Could Lead to an Upgrade

Upward ratings pressure could develop if Avinor's Cash Interest Coverage Ratio was consistently higher than 5.0x, and Funds From Operations (FFO)/Debt was in the high teens in percentage terms on a sustained basis.

### Factors that Could Lead to a Downgrade

The rating could come under downward pressure if (1) the capital investment programme were to experience overruns or delays in commissioning; or (2) Avinor's Cash Interest Coverage Ratio fell below 4.0x and the FFO/Debt ratio declined below 10% on a sustained basis. Furthermore, any downwards move in the Government of Norway's credit rating could put downward pressure on Avinor's rating.

# **Key Indicators**

Exhibit 2

Avinor AS

	31/12/2018	31/12/2017	31/12/2016	31/12/2015	31/12/2014
(FFO + Cash Interest Expenses) / Cash Interest Expenses	5.0x	4.2x	5.1x	4.9x	4.8x
FFO / Debt	13.1%	10.0%	13.0%	13.7%	14.0%
Moody's Debt Service Coverage Ratio	5.5x	3.8x	4.3x	4.2x	4.1x
RCF / Debt	12.1%	7.8%	10.8%	11.1%	11.5%

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

Note: For definitions of Moody's most common ratio terms please see the accompanying <u>User's Guide</u>.

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.moodys.com for the most updated credit rating action information and rating history.

#### **Profile**

Avinor is a limited liability company fully owned by the Government of Norway. The company owns and operates a network of 44 airports in Norway, handling some 96% of Norwegian passenger traffic in 2018, and provides the vast majority of air navigation services to both civilian and military flights within Norwegian airspace.

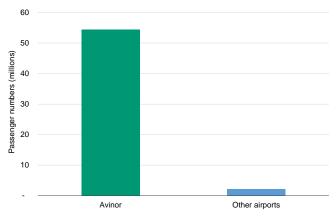
# **Detailed Rating Considerations**

#### Monopolistic position and modest transmodal competition

Avinor is 100% owned by the Government of Norway, but is incorporated as a limited liability company subject to normal laws. It is classified in Norway as a category 4 company on the scale of State-Owned Enterprises, and is thus viewed as an important entity by the State on the basis that it fulfils "national sectoral political" objectives. Avinor owns and operates 46 airports in Norway, and controls all key aviation infrastructure.

Avinor is the sole provider of air navigation services within Norwegian airspace and has a virtual monopoly of air travel originating and ending in Norway, capturing approximately 99% of domestic passengers and approximately 93% of international passengers. The company faces limited competition within Norway, as international airports in other Scandinavian countries are not readily accessible to the Norwegian population. Additionally, while other forms of transport are used in the south of Norway, the topography of the country and the large distances between population centres means that air travel is the most efficient mode of travel. Fast rail connections are limited to the Oslo region and cover relatively short distances. The location of Norway on the periphery of Europe also means that air travel is largely required when travelling internationally.

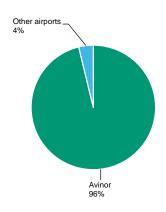
Exhibit 3
Passenger traffic at Norwegian airports
As of December 2018



Source: Company, Moody's Investors Service

Exhibit 4

Market share of the Avinor group and other airports in Norway
As of December 2018



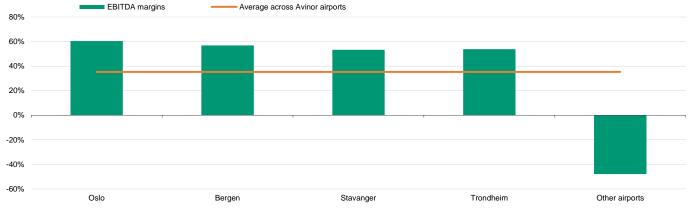
Source: Company, Moody's Investors Service

#### Supportive strategic framework underpinned by government policy

The Government of Norway, via the Norwegian Ministry of Transport and Communications (MoTC) – which owns 100% of the share capital of Avinor – has established that the company should operate to support the population in providing a vital form of transportation, rather than seeking to maximise profits. Consequently, Avinor's reported EBITDA margins for its airports division are lower when compared to other European airport companies.

More granular analysis of the profitability of Avinor's airports shows that the four largest airports<sup>2</sup> – which together represent around 80% of traffic in the network – achieve high EBITDA margins, comparable to (and in some cases higher than) those reported by some of the most profitable airport groups in Europe. Avinor's average profitability for its airports is however, moderated by the operation of a number of loss-making regional and local airports, which operate to pursue the government's social objectives, rather than for strict profit motives. The Norwegian government is effectively using the larger and more profitable airports to subsidise the operations of smaller, unprofitable airports.

Exhibit 5
Reported EBITDA margins at Avinor's four largest airports vs. the rest of the network As of December 2018



Source: Company, Moody's Investors Service

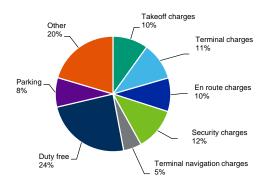
Nevertheless, the State does not play an active role in the day-to-day management of the company and requires Avinor to operate as a commercial entity with management and a Board that comprises of experienced commercial professionals, rather than civil servants.

Avinor's strategic objectives are outlined in the Ten-Year Transportation Plan, with specific operational and financial requirements set out in the Avinor Ownership Report. These documents – which are effectively government policy documents, rather than a formal charter – set out the focus for Avinor on quality improvements for, and financial returns from, the airport network and air navigation system in Norway. In the latest iteration of the Ownership Report, the Norwegian government announced plans to separate Avinor's air navigation system and the tower operation activities, in order to promote competition and reduce costs, and instructed the company to prepare for a potential disposal of the air navigation subsidiary by 2021.

The State also plays a role in aeronautical rate-setting, and while Norway is not an EU member state, the government has transposed the EU's Airport Charges Directive into Norwegian law. The directive sets out minimum requirements in terms of transparency, consultation with airlines and non-discrimination of charges, and mandates the setting up of an independent supervisory authority.

Since the transposition of the directive, charges are determined using a Regulated Asset Based (RAB)-based, single-till formula. Regulated revenues are defined as yearly passenger price caps derived from dividing annual passenger forecasts by the sum of (1) the remuneration of an agreed regulatory asset base at a predetermined weighted average cost of capital; and (2) allowances for the recovery of asset depreciation and operating costs; and (3) the netting-off of commercial revenues. However, the latest iteration of the Ownership Report states that "in periods of high investment, all commercial profits will not necessarily be used to subsidise airport charges", particularly in situations where the company's self-imposed minimum equity ratio of 40% could be at risk of being breached.

Exhibit 6
Commercial revenues comprise a material portion of Avinor's revenue base
As of December 2018



Source: Company, Moody's Investors Service

Exhibit 7
Commercial yields per passenger are outpacing aviation yields



Source: Company, Moody's Investors Service

The State also requires Avinor to establish a uniform set of aviation charges across its network, effectively leading to a cross-subsidisation of the marginal rural airports by the more commercially viable larger airports including Oslo, Stavanger, Bergen and Trondheim.

In practice, after consulting with the airlines, Avinor management's proposed charges in the annual plan reflect the financial objectives outlined in the Ownership Report and the proposed capital investment plans, although the company may in the future consider setting tariffs within a multi year horizon to smooth changes and provide more visibility to investment planning. Regulatory oversight is exercised by officials at the MoTC.

From a competitive perspective, management and the MoTC also endeavour to set charges at levels that will encourage airlines to develop their route strategies in Norway rather than in nearby competitor countries such as Denmark and Sweden. The State aims to ensure its companies make a fair return on capital employed, although this is not the primary objective of Avinor.

## Exposure to Norway's economic environment can negatively impact revenue growth

Norway has a total population of approximately 5.3 million, or around 1% of the total European Economy Area (EEA) population. The Norwegian economy is wealthy and well-developed, with very high standards of living and a cohesive society, as indicated by high GDP per capita figures and some of the lowest levels of income inequality in the world. Norway is routinely ranked near the top of the United Nations' Human Development Index and the Inequality-Adjusted Human Development Index tables.

However, Norway's economy is heavily dependent on natural resources, most significantly oil and gas, but also hydroelectric power and fishing. Altogether, the oil and gas sector represent around 22% of Norwegian Gross Domestic Product (GDP) and 67% of the country's exports. This exposes the country to potential economic pressure in the context of low commodity prices, which at times of lower economic activity can, in turn, have a negative impact on traffic at Avinor's airports.

Over the last decade, passenger growth has averaged almost 3% per annum across Avinor's network, while its main managed airport, Oslo, reported average growth of around 4% over the same period. Avinor has experienced relatively low volatility in passenger traffic over the past decade compared to other airports rated by Moody's, with the standard deviation of the growth rate over the last ten years at around 3.7%.

More generally, however, traffic growth at Avinor's airports has historically been affected by Norway's sluggish macroeconomic environment, particularly from mid-2014, when crude oil prices began to slide. Between June 2014 and January 2015, crude oil prices decreased by more than 50% and a mild recovery in the first half of 2015 was followed by further declines. Crude oil prices somewhat recovered from the first half of 2016 and have currently reached approximately \$66 per barrel, but remain significantly lower than historical levels.

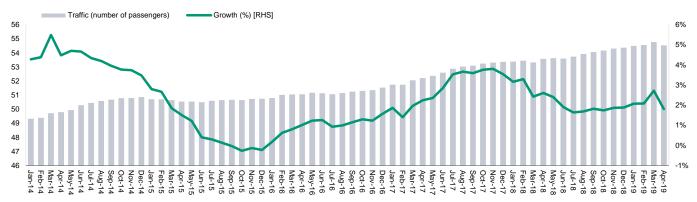
Subdued oil prices have led to airports serving cities exposed to the oil industry, such as Stavanger, which is home to Equinor ASA (Aa2, stable), the largest oil and gas operator in the Norwegian continental shelf, and Bergen, experiencing sharp passenger traffic declines in 2015 (-4.7% and -3.1% respectively). Travel by helicopter to and from oil and gas offshore platforms was also hit by lower levels of activity within the sector. However, recent trends indicate growth in Stavanger of 2.3% in the twelve months to May 2019, while Bergen's passenger traffic rose by 3% over the same period. Growth at both airports was supported by increases in both international and domestic passengers.

The fall in oil revenues for the country in 2014 triggered a depreciation of the Norwegian Krone, increasing the cost of overseas travel and weighing on the demand for air travel. Additionally, while unemployment remains modest by international standards, Norway's unemployment rate increased following the decline in oil prices and has stayed higher than its pre-2014 levels, contributing to reductions in discretionary demand for travel.

However, the diverse nature of the airports in the Avinor network and an increase in inbound tourism triggered by the Norwegian Krone's depreciation provided a buffer against the negative impact of lower oil prices, resulting in a modest traffic decline of 0.25% in 2015 (or c. 0.1 million passengers) over the entire network. As the economy stabilised and absorbed the oil price shock, the Avinor network returned to growth in 2016, in spite of the introduction of a NOK80 tax on every departing passenger on 1 June 2016 (which has increased further to NOK83 since the introduction). Passenger growth reached 4.1% and 2.8% in 2017 and 2018, respectively. However, these growth rates remain below pre-2014 levels.

In the first five months of 2019, traffic growth was sluggish at 0.5% compared to 2018, due to SAS pilots strikes in April and May, which largely affected transfer traffic, particularly at Stavanger airport, although O&D traffic growth was also muted at 0.8% over the same timeframe due to the strikes.





Source: Company, Moody's Investors Service

## High share of origin and destination traffic, albeit serviced by few airlines with a weak credit profile

Avinor is regarded as an origin and destination (O&D) airport system and the proportion of O&D traffic has been above 80% for the last decade (around 82% currently). This reflects a strong core of traffic and provides a more resilient source of revenues compared to transfer traffic. Although total transfer and transit transfer at Avinor represents 18% of total traffic, more than half of the transfer and transit traffic reported by Avinor is internal to the Avinor network (i.e. trips between two Norwegian airports with a stopover, typically at Oslo airport).

Given the geographic characteristics of Norway and the importance of air transport for internal mobility, the domestic intra-network transfer traffic behaves more like O&D traffic and is expected to be relatively resilient to an airline failure. The proportion of traffic that is therefore at risk in the Avinor network is a more modest 7%.

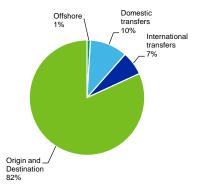
Avinor's carrier base is, however, relatively concentrated, with its two main carriers, <u>SAS</u> (B1 stable) and Norwegian (not rated), capturing more than three quarters of passenger traffic at Avinor's airports.

SAS's credit profile has improved in recent months, reflecting some strengthening in its revenue generation and its focus on yield improvements and cost efficiency measures implemented. However, we expect that continued competition, higher jet fuel prices and a weaker SEK vs. USD, will result in a deterioration in operating performance in 2019. More generally, despite far-reaching internal restructuring efforts, the company's operating profitability remains relatively low compared with most other Moody's rated airlines and weighs on the carrier's credit profile.

Norwegian, which handled almost 38% of total passengers at Avinor in 2018, has recorded a significant increase in leverage to finance aggressive growth plans, while in early 2019 the carrier was forced to finalise a capital increase of approximately NOK3 billion to strengthen its balance sheet and relieve pressure on financial covenants. Notwithstanding the cash injection, recent developments surrounding the Boeing 737 MAX aircraft, which remains grounded due to safety concerns, and to which Norwegian is significantly exposed, may result in renewed pressures on the carrier, if sustained.

The weak credit profile of its main carriers weighs on Avinor's credit quality, although, given the nature of the traffic on Avinor's network, a failure of either of these airlines, while disruptive, would not likely lead to material permanent losses of traffic for the network. However, the high volume of capacity that would need to be replaced and the relatively small number of carriers already operating at Avinor's airports means that it would take some time before existing demand is serviced by other airlines.

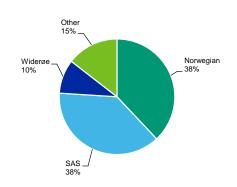
Traffic breakdown
As of December 2018



Note: Excludes transit passengers Source: Company, Moody's Investors Service

Exhibit 10

Avinor's carrier base by market share
As of December 2018



Source: Company, Moody's Investors Service

## Continued high levels of capital expenditure

Over the last few years, Avinor has embarked on an extensive capital programme, which included the delivery of two new terminals (one at Oslo and one at Bergen) for a budgeted cost of NOK18.4 billion.

Terminal 2 officially opened at Oslo in April 2017, increasing passenger capacity by 50% and offering relief to an airport that was operating close to capacity at peak times. The new terminal at Bergen opened in August 2017 and almost doubled the capacity of the airport, which was operating above its efficient capacity.

However, investment levels are not expected to reduce significantly after the completion of these two projects. Avinor is planning a capital investment programme of NOK26.7 billion between 2019 and 2024. New projects include the expansion of the non-Schengen terminal area, the provision of US pre-clearance facilities and the replacement of the handling system at the Oslo airport, the expansion of the terminal at Trondheim airport, the roll-out of remotely controlled towers for air navigation services, a new terminal at Tromsø airport and a new airport at Bodø. However, we note that the modularity of these projects allows management to defer or delay some of these investments if the business rationale no longer justifies them.

8.0 New/discretionary capex

5.0 4.0 2.0 2019 2020 2021 2022 2023 2024

Exhibit 11

Capital expenditure programme 2019-24

Source: Company, Moody's Investors Service

#### Conservative financial policy

Management has indicated that it intends to pursue a conservative financial strategy, in the context of the requirement to finance its major capital programme. The current debt facilities – which include loans from the European Investment Bank, Nordic Investment Bank and the company's revolving credit facility – contain financial covenants requiring an Equity Ratio (defined as Equity/(Equity + Net Interest Bearing Debt) in excess of 30% and places constraints on Avinor's ability to enter into additional indebtedness. Notwithstanding these protections, the company has chosen to target a more conservative 40% minimum equity ratio, which is enshrined in the company's by-laws.

The conservative approach to financial policy is perhaps best exemplified by the company's dividend strategy. Whilst Avinor's FFO/Debt metric has come under pressure as a result of its sizeable investment programme, the company has nonetheless sought to minimise the additional indebtedness needed to finance these investments. To achieve this, Avinor's shareholder, the Norwegian government, agreed to impose a hard cap of NOK500 million per annum on dividends until 2018. As the company has sold non-core assets, such as hotel businesses located near some of Avinor's airports, the cap on dividends has meant that the proceeds from these sales were used to finance investments rather than extracted in the form of dividends, thereby minimising additional indebtedness. As a result, Avinor's RCF/Debt metric has been broadly stable since 2011, in spite of the notable investment effort and the increased indebtedness.

The government has however announced that the dividend cap has ceased to apply from 2019, but has emphasised that in periods of high investment, airport charges may not be fully subsidised by commercial revenues, particularly in situations where the company's self-imposed minimum equity ratio of 40% could be at risk of being breached.

Following a dip in the FFO/Debt ratio in 2017 – the result of a series of one-off events including payments related to the settlement of disputes with the Norwegian armed forces and a NOK415 million impact related to the transfer of pension liabilities from the state to Avinor – the ratio recovered in 2018 to the low teens in percentage terms and we expect the positioning to remain broadly stable in 2019-20, also driven by the supportive traffic, as the opening of new terminal facilities should have a positive impact on revenue growth.

## High likelihood of extraordinary support from the Government of Norway

We view Avinor as a Government-Related Issuer given the 100% ownership by the Government of Norway and therefore apply the Government-Related Issuers rating methodology, published in June 2018. Avinor's credit quality therefore reflects: (1) its standalone credit profile expressed as a baseline credit assessment of baa1, (2) our sovereign rating for the <u>Government of Norway</u> (Aaa stable); (3) our assessment of a moderate level of default dependence; and (4) our assessment of the high likelihood of extraordinary support.

We have assigned three notches of uplift from the baseline credit assessment, reflecting the strategic importance of the company and the recent examples of extraordinary State support. These include a payment holiday on the State loan provided to Avinor's subsidiaries, a relaxation of dividend payments in 2009 and 2010, and the decision to cap dividend payments at NOK500 million

annually until 2018, to finance capital investments. Furthermore, we note that while Avinor does not receive direct ongoing State subsidies, existing legislative provisions would allow such subsidies to be provided at relatively short notice.

#### **Structural Considerations**

Following a corporate reorganisation, Oslo Lufthavn AS (the company that owns Oslo Gardermoen airport and was 100% owned by Avinor) was merged into Avinor on 11 January 2016, decreasing the proportion of the Avinor Group debt that was structurally subordinated to indebtedness at the subsidiaries' level from c. 30% to less than 10%. At the time, we did not make adjustments to reflect structural subordination, given the low percentage of group debt provided to its operating subsidies and the relatively limited amount of cash they generate. Furthermore, following the prepayment of its SPV loans in May 2018, Avinor currently does not have any structurally subordinated debt.

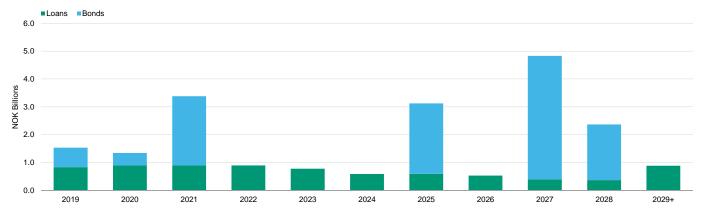
# **Liquidity Analysis**

In line with other major airport companies, Avinor generates strong operating cash flow throughout the year, but with some seasonality given the northern hemisphere summer season generates more cash flows than the winter season. Avinor's projected cash balances and available bank facilities should be sufficient to meet its cash requirements for the next 12 months, and we expect Avinor to maintain good liquidity.

Avinor benefits from a sound liquidity position by virtue of its positive operating cash flows and sizeable undrawn banking lines. The company's current financing strategy is to pursue diversity in terms of sources of credit and to achieve a spread of maturities.

As at 31 March 2019, Avinor had an estimated NOK1.4 billion of cash and cash equivalents and NOK4.6 billion of undrawn banking lines. The largest undrawn line of NOK4 billion which is revolving and subject to utilization conditions, is due to mature in June 2024. Additionally, Avinor has an unused overdraft limit of NOK0.6 billion in place. The company has NOK1.5 billion of maturities in 2019, of which NOK0.7 billion are attributable to bonds and the remainder to bank loans.

Exhibit 12
Avinor's maturities are reasonably well spread over the next ten years
As of December 2018



Source: Company; Moody's Investors Service

# **Rating Methodology and Scorecard Factors**

Avinor's rating reflects our assessment of the company's business profile and financial performance in line with Moody's <u>Privately Managed Airports and Related Issuers</u> Rating Methodology, published in September 2017 and Moody's <u>Government-Related Issuers</u> rating methodology, published in June 2018.

Exhibit 13

Avinor AS - Rating Factors Grid

Privately Managed Airports and Related Issuers Industry Grid [1][2]	Curr 31/12/		Moody's 12-18 Month Forward View As of July 2019 [3]		
Factor 1: Concession and Regulatory Frameworks (15%)	Measure	Score	Measure	Score	
a) Ability to Increase Tariffs		Baa		Baa	
p) Nature of Ownership / Control	·	Aaa		Aaa	
Factor 2: Market Position (15%)					
a) Size of Service Area	<del></del>	Aa		Aa	
o) Economic Strength & Diversity of Service Area	<del></del>	Aa		Aa	
c) Competition for Travel	<del></del>	Aaa		Aaa	
factor 3: Service Offering (15%)					
a) Passenger Mix	-	Aa		Aa	
) Stability of traffic performance		А		А	
c) Carrier Base		Baa		Baa	
Factor 4: Capacity and Capital (5%)					
a) Ability to accommodate expected traffic growth		Baa		Baa	
actor 5: Financial Policy (10%)					
a) Financial Policy		Α		Α	
Factor 6: Leverage and Coverage (40%)	-				
a) (FFO + Cash Interest Expense) / (Cash Interest Expense)	5.0x	Α	5.0x - 5.5x	А	
b) FFO / Debt	13.1%	Baa	12% - 13%	Baa	
e) Moody's Debt Service Coverage Ratio	5.5x	А	5.0x-5.3x	А	
I) RCF / Debt	12.1%	Α	10% - 11%	Α	
Rating:					
Scorecard Indicated Outcome Factors 1-6		A2		A2	
Rating Lift		0.0		0.0	
a) Scorecard Indicated Outcome		A2		A2	
b) Baseline Credit Assessment Assigned		baa1			
Government-Related Issuer	Fac	tor			
a) Baseline Credit Assessment	baa	a1	_		
o) Government Local Currency Rating	Aaa S	table	_		
c) Default Dependence	Mode	erate	_		
d) Support	Hiç	gh	-		
e) Final Rating	A	1			

[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 2018. [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

# **Ratings**

#### Exhibit 14

Category	Moody's Rating
AVINOR AS	
Outlook	Stable
Issuer Rating -Dom Curr	A1
Senior Unsecured	A1
Source: Moody's Investors Service	

# **Appendix**

Exhibit 15

#### Peer Comparison table

		Avinor AS			Copenhagen Airports A/S			Brussels Airport Company NV/SA		
		A1 Stable			Baa2 Stable		Baa1 Stable			
(in EUR millions)	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	
	Dec-2016	Dec-2017	Dec-2018	Dec-2016	Dec-2017	Dec-2018	Dec-2016	Dec-2017	Dec-2018	
Revenue	€ 1,160.9	€ 1,235.2	€ 1,220.5	€ 593.8	€ 596.7	€ 596.3	€ 461.2	€ 525.8	€ 568.2	
EBITDA	€ 395.3	€ 439.1	€ 443.6	€ 336.5	€ 354.5	€ 342.0	€ 285.0	€ 305.3	€ 323.9	
EBITDA margin %	34%	36%	36%	57%	59%	57%	62%	58%	57%	
Funds from Operations	€ 309.3	€ 271.8	€ 335.4	€ 265.0	€ 274.5	€ 261.1	€ 195.9	€ 219.6	€ 225.8	
Total Debt	€ 2,535.9	€ 2,755.7	€ 2,681.4	€ 732.7	€ 808.9	€ 954.6	€ 1,375.0	€ 1,375.0	€ 1,375.0	
FFO Interest Coverage	5.1x	4.2x	5.0x	10.1x	10.0x	9.8x	5.7x	7.2x	7.0x	
FFO / Debt	13.0%	10.0%	13.1%	36.2%	33.9%	27.3%	14.2%	16.0%	17.1%	
Debt Service Coverage Ratio	4.3x	3.8x	5.5x	9.4x	9.7x	9.0x	4.1x	4.8x	5.9x	
RCF / Debt	10.8%	7.8%	12.1%	14.5%	14.1%	10.3%	5.0%	7.8%	8.1%	

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.

Source: Moody's Financial Metrics<sup>TM</sup>

Exhibit 16

### Avinor AS - Adjusted Debt Breakdown

(in NKRONE Millions)	FYE Dec-14	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18
As Reported Debt	15,298	18,490	19,957	22,811	21,741
Pensions	2,483	1,716	2,278	3,540	4,067
Operating Leases	368	339	347	350	269
Moody's-Adjusted Debt	18,148	20,544	22,581	26,701	26,077

All figures are calculated using Moody's estimates and adjustments. Source: Moody's Financial Metrics  $^{\text{TM}}$ 

Exhibit 17

# Avinor AS - Adjusted FFO Breakdown

(in NKRONE Millions)	FYE Dec-14	FYE Dec-15	FYE Dec-16	FYE Dec-17	FYE Dec-18
As Reported Funds from Operations (FFO)	2,879	3,335	3,265	3,575	4,007.4
Operating Leases	49	45	45	46	34.3
Capitalized Leases	-183	-275	-235	-48	-37.8
Pensions	52	0	0	8	24
Alignment FFO	-265	-387	-200	-630	-805
Unusual adjustment	0	2	0	-415	0.0
Moody's-Adjusted Funds from Operations (FFO)	2,532	2,720	2,874	2,536	3,222

All figures are calculated using Moody's estimates and adjustments. Source: Moody's Financial Metrics  $^{\rm TM}$ 

# **Endnotes**

- 1 Owing to the geographical reach of the Avinor network, two out of three Norwegians have access to an airport within an hour's travel and 99.5% of the country's population is able to visit the capital Oslo and return home on the same day.
- 2 Oslo, Bergen, Stavanger and Trondheim airports.

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