

CREDIT OPINION

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Update



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ASTM S.p.A.

Annual update to credit analysis

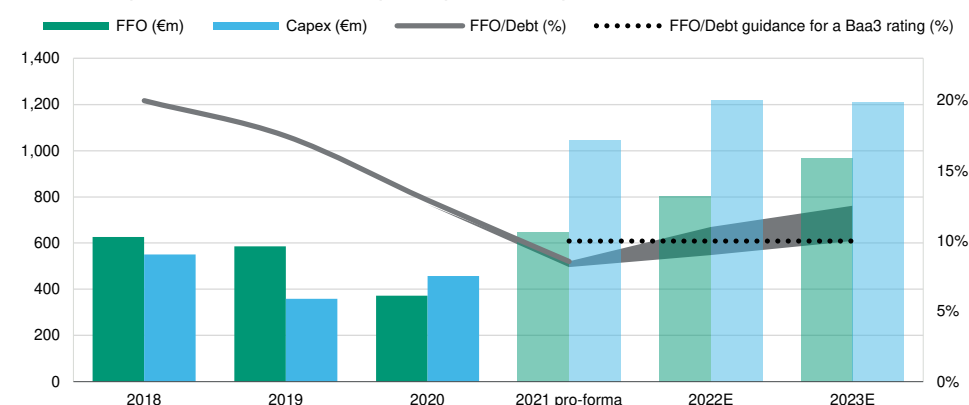
Summary

The credit quality of [ASTM S.p.A.](#) (ASTM, Baa3 stable) is underpinned by (1) the strong fundamentals of the group's Italian motorway network, comprising essential transport links in some of the wealthiest regions of [Italy](#) (Baa3 negative); (2) the size and diversification of Ecorodovias Infraestrutura e Logística S.A. (Ecorodovias)'s motorway network, which is located in the wealthiest states of [Brazil](#) (Ba2 stable); and (3) the group's historically balanced financial policy and strong liquidity profile.

These strengths are, however, partially offset by (1) political interference in the regulatory environment and tariff framework in Italy; (2) the relatively large investment programme in Italy and Brazil associated with recently awarded toll road concessions; (3) the significant increase in financial leverage following a series of debt-financed transactions; and (4) some exposure to higher risk construction and engineering activities, although their contribution to the overall group EBITDA is expected to remain limited.

Exhibit 1

ASTM's financial metrics are recovering to a level commensurate with a Baa3 rating
Funds from operations (FFO)/debt and capital expenditure (capex) evolution



From 2019, data reflects ASTM S.p.A. consolidated figures, while for 2018 the chart presents SIAS S.p.A. consolidated data. 2021 pro-forma metrics reflect the consolidation of Ecorodovias and SITAF for the whole year.

All figures are based on 'Adjusted' financial data. The estimates represent Moody's forward view; not the view of the issuer.
Source: Company, Moody's Investors Service

In full-year 2022, we anticipate total volumes on ASTM's Italian network to reach levels close to 2019. However, the pace of traffic growth beyond 2022 is threatened by a deteriorating macroeconomic environment. In Brazil, the operating performance of Ecorodovias' network continues to be resilient, sustained by the award of new concessions.

Overall, this trend will contribute to an improvement of the group's credit metrics over the next year.

Credit strengths

- » Strong fundamentals of the Italian motorway network underpins a resilient cash flow profile
- » Ecorodovias' large and strategically located toll road portfolio in Brazil, with a long weighted average concession life of around 19 years
- » Historical balanced financial policy, although significant increase in debt leverage will limit the financial flexibility of the group over the coming years

Credit challenges

- » Regulatory environment characterised by some unpredictability and political interference
- » Relatively short weighted average concession life of Italian toll roads of around 9-10 years
- » Large investment programme in Italy and Brazil associated with recently awarded toll road concessions
- » Some exposure to higher risk construction and engineering activities

Rating outlook

The stable outlook reflects our expectation that ASTM's financial metrics will improve over the coming year, such that the funds from operations (FFO)/debt ratio will be comfortably positioned above 10% and the Moody's Debt Service Coverage Ratio (DSCR) will remain above 1.3x on a consolidated basis.

Factors that could lead to an upgrade

Given the high leverage of the group, upward pressure on ASTM's ratings is not currently anticipated. Upward pressure could build over time if (1) the company's financial profile materially improves, such that FFO/debt was at least 17% and Moody's DSCR was at least 1.4x on a sustainable basis; and (2) the group maintains a strong liquidity profile and a prudent financial policy.

Factors that could lead to a downgrade

Downward rating pressure could develop as a result of (1) a persistent weakening in the group's financial profile such that FFO/debt would remain below 10% or Moody's DSCR would remain below 1.3x on a sustained basis; (2) a deterioration in the group's liquidity position; or (3) a growth strategy resulting in debt-funded acquisitions or significant investments in activities with a higher risk profile than motorway concessions.

Key indicators

Exhibit 2

ASTM S.p.A.

	Dec-18	Dec-19	Dec-20	Dec-21 (1)	Dec-21 pro-forma (2)	Dec-22 (E)	Dec-23 (E)
Cash Interest Coverage	7.4x	7.4x	5.8x	4.1x	3.4x	3x - 4x	3x - 4x
FFO / Debt	20.0%	17.5%	12.9%	6.1%	8.5%	9% - 11%	10% - 12%
Moody's Debt Service Coverage Ratio	1.3x	1.1x	1.1x	0.5x	1.0x	1.3x - 1.5x	1.5x - 1.7x
Moody's Concession Life Coverage Ratio	1.4x	1.1x	1.2x	0.6x	1.1x	1.6x - 1.8x	1.8x - 2.1x

(1) Metrics calculated on the basis of ASTM's published annual report, which reflects consolidation of Ecorodovias for only one month. (2) Metrics reflect 12 months pro-forma numbers including the consolidation of Ecorodovias.

All ratios are based on 'Adjusted' financial data and incorporate [Moody's Global Standard Adjustments for Non-Financial Corporations](#). (E) Estimates represent Moody's forward view; not the view of the issuer.

For definitions of Moody's most common ratio terms please see the accompanying [User's Guide](#).

Source: Moody's Financial Metrics

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

Profile

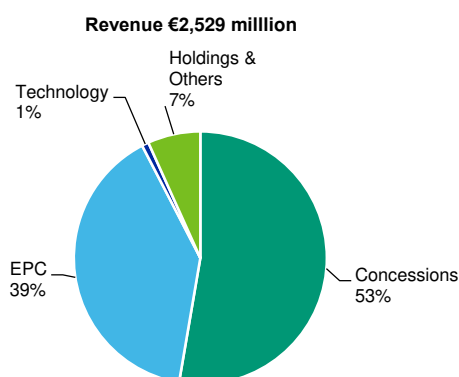
ASTM is the second-largest toll road operator in Italy. The company's consolidated domestic network consists of almost 1,300 km of tolled motorways, representing around 23% of the national network. In Italy, ASTM also holds stakes in two additional motorway concessions with a cumulative length of around 50 km (Tangenziale Esterna Milano and Gran San Bernardo Tunnel). In addition, ASTM is the controlling shareholder of Ecorodovias, which manages close to 4,700km of toll roads through 11 concessions in Brazil.

ASTM is also active in the engineering, procurement and construction (EPC) sector. Itinera is the largest subsidiary in this segment and operates in Europe, Latin America and the United States. These activities present higher business risk than toll roads, but allow the group a higher degree of business integration. Even if the contribution of EPC to revenues is relatively high (around 40% in 2021 and 22% in H1 2022), due to the lower margins, the actual EBITDA contribution is limited (2% in 2021 and a €134 million loss in H1 2022)¹

Exhibit 3

EPC and other activities represent around 40% of total revenues...

ASTM's 2021 revenue breakdown

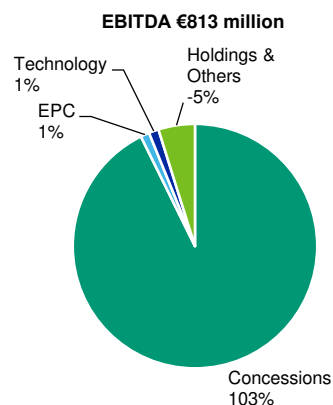


Source: Company, Moody's Investors Service

Exhibit 4

... but only 2% of EBITDA of the group

ASTM's 2021 EBITDA breakdown

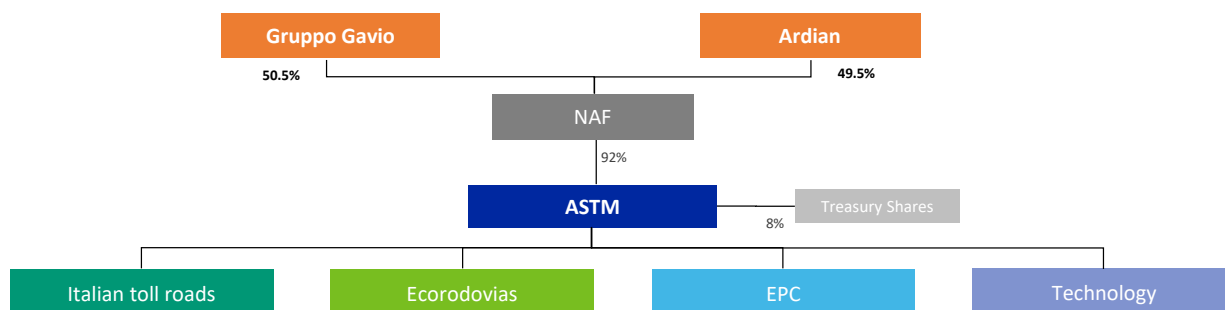


Source: Company, Moody's Investors Service

Following ASTM's delisting in June 2021, Gruppo Gavio increased its stake in ASTM to 50.5%. The stake is held through the holding company Nuova Argo Finanziaria S.p.A. (NAF), of which the private equity company Ardian owns the remaining 49.5%.

Exhibit 5

Simplified ASTM's shareholder structure



Source: Company

Detailed credit considerations

Strong business profile underpinned by the size and location of the Italian network

ASTM's consolidated Italian network currently consists of almost 1,300 km of operational toll roads, comprising several essential transport links. ASTM's motorways are mainly located in the north-west of Italy, connecting major cities within the area and providing access between provincial and rural areas. The fundamentals of the service area and the competitive environment are favourable, because ASTM provides essential transport services to some of Italy's most economically active regions. Road transportation is dominant in the area, as it is better suited to meet the mobility requirements of a country with a widespread population gravitating around small and medium-sized provincial centres, a fragmented commercial and industrial structure and many regions with mountainous or hilly terrain.

The traffic profile of ASTM's Italian network exhibits a generally diversified traffic base, with a mixture of commuter and leisure traffic, long-distance journeys and commercial traffic. We consider the varied user profile as a supporting feature of the company's credit positioning. In 2021, freight traffic accounted for approximately 29% of ASTM's domestic traffic (28% in H1 2022). The main contributor to traffic volumes is SATAP, concessionaire for the A4 Turin-Milan and A21 Turin-Alessandria-Piacenza motorways, accounting for 33% of ASTM's consolidated traffic volumes in 2021 (34% in H1 2022). The second-largest contributor is SALT, concessionaire for the A12 Livorno Sestri, A11 Viareggio Lucca and A15 Fornarola La Spezia, accounting for approximately 22% of total traffic in 2021 (21% in H1 2022).

In 2020, ASTM increased its stake in Società Italiana Traforo Autostradale del Frejus S.p.A. (SITAF) to a total of 67.2%. SITAF is the owner of the concession, expiring in 2050, for the design, construction and management of the Frejus tunnel (about 13 km long) and the connector to the tunnel, the A32 Turin-Bardonecchia motorway (73 km long). SITAF is an essential infrastructure link connecting Italy and France with a relatively stable regulatory framework.

ASTM's Italian concessions have different maturities and four of these concessions expired between 2016 and 2021 (see exhibit 6). Upon retendering, the Italian government decided to aggregate the four expired concessions under two separate tenders. While ASTM won both tenders in 2021, the award of the new 'A21-A5/A4' concession was revoked due to an alleged formal irregularity during the tender pre-qualification phase. As of today, a final decision on the award from the Italian Council of State is still pending. Meanwhile, in line with the Italian legislation, the group continues to operate the assets and is entitled to receive a terminal value (equal to the unamortized value of the investments) once the assets will be returned to the grantor. Importantly, the awarding of the 'A12-A10' tender is not affected by the above situation and the hand-over process is expected to be finalized in the first half of 2023.

Exhibit 6

Overview of ASTM's Italian concessions As of June 2022

Concessions	Stake	Extension (Km)	EBITDA (2021, € mln)	Maturity	Estimated terminal value (€ mln)	Location
SATAP A4	99.9%	130	188	2026	772	Piedmont / Lombardy
SATAP A21	99.9%	168	109	2017	379	Piedmont
SALT A12	95.2%	155	92	2019	559	Liguria
SALT A15	95.2%	101	50	2031	-	Emilia - Romagna
ADF A10	73.0%	113	101	2021	388	Liguria
ADF A6	73.0%	131	25	2038	-	Piedmont
SAV A5	71.3%	60	29	2032	-	Valle d'Aosta
AT-CN A33	65.0%	55	32	2031	290	Piedmont
AP A21	51.0%	100	25	2043	-	Lombardy
ATIVA (A5/A4)	72.3%	156	63	2016	400	Piedmont
SITAF	67.2%	94	93	2050	-	Piedmont
Total		1,262	807			

EBITDA as reported by the company (under IFRS).

Expired concessions SATAP A21, SALT A12, ADF A10 and ATIVA (A5/A4) are currently managed in prorogatio. The new concession for the 'A12-A10' has 11.5 years tenor from the signing date.

Terminal value reflects the expected amounts at handover date and includes the expected investment plans, cross financing agreement for AT-CN A33/SATAP A4 and the tenders for A21-A5/A4 and A12-A10. As of June 2022, the amount of regulatory risk provisions amounted to €422 million.

Source: Company, Moody's Investors Service

Overall, including the new awarded 'A12-A10' concession, we expect that by year-end 2023 the EBITDA-weighted average concession life for ASTM's Italian motorways will be between 9 to 10 years.

Ecorodovias' large toll road portfolio located in strong service areas of Brazil

Ecorodovias is one of Brazil's largest infrastructure groups focused on motorway concessions. As of September 2022, Ecorodovias' portfolio includes 11 concessions² covering 4,700 kilometers of toll roads located in the south-east of Brazil. Ecorodovias also operates and maintains a port company located in the port of Santos, Ecoporto, which is the fifth largest port operator in Brazil.

Ecorodovias benefits from large and strategically located concessions, representing a high-quality asset base in Brazil. The group's assets are positioned at the main channels for the transportation of exports and import of goods and close to the main ports of the country. The group has a significant presence in the most important commercial centers of Brazil and benefits from a diversified user base, as is typical for large networks. The combined traffic profile of its toll roads is well balanced, with around 54% in freight traffic and 46% in leisure and commuter traffic in 2021 (57% and 43% in the first nine months of 2022). Two of its main concessions, Ecovias and Ecopistas, provide essential transport services in the state of São Paulo, which is one of the largest and wealthiest states in the country. Ecovias is also a direct link to the port of Santos, the largest port in Latin America.

The EBITDA-weighted average concession life of Ecorodovias' portfolio was around 16 years as of December 2021 (pro-forma for the extension of the Ecovias concession from 2026 to 2033), with maturities ranging from 2026 to 2050. With the start of operations of Ecovias do Araguaia and EcoRioMinas in 2022 and Noroeste Paulista in 2023 we expect that average concession life of Ecorodovias group will increase to around 19 years in 2023, which supports the long-term cash flow profile and credit metrics of the group.

Exhibit 7

Overview of Ecorodovias' concessions As of September 2022

Concessions	Extension (Km)	EBITDA* (2021, BRL mln)	Maturity	Location	Type of concession	Regulator
Ecovias	177	808.1	2034	São Paulo	State	ARTESP
Ecopistas	144	203.0	2039	São Paulo	State	ARTESP
Ecosul	457	243.3	2026	Rio Grande do Sul	Federal	ANTT
Eco101	479	64.5	2038	Espírito Santo	Federal	ANTT
Ecoponte	29	81.0	2045	Rio de Janeiro	Federal	ANTT
Eco135	364	207.2	2048	Minas Gerais	State	SETOP
Eco050	437	146.9	2043	Minas Gerais / Goiás	Federal	ANTT
Ecovias do Cerrado	437	77.0	2049	Minas Gerais / Goiás	Federal	ANTT
Ecovias do Araguaia	851	-11.5	2056	Tocantins / Goiás	Federal	ANTT
EcoRioMinas	727	0.0	2052	Rio de Janeiro / Minas Gerais	Federal	ANTT
Noroeste Paulista	600	0.0	2053	São Paulo	State	ARTESP
Total	4,702	1,820				

*EBITDA as reported by the company, excluding construction revenue and cost, provision for maintenance and provisions related to the Leniency agreement and the agreements with former executives.

EcoRioMinas and Ecovias do Araguaia started operation in September 2022 and October 2022 respectively. Noroeste Paulista will start operations in 2023.

Source: Company, Moody's Investors Service

In 2016, ASTM acquired the co-control stake of around 42% in Ecorodovias and over the years the group increased its stake through a series of transactions. In 2020, the group agreed with Primav Construções (the other main shareholder of Ecorodovias) to dissolve the co-control structure and to capitalize Ecorodovias. Following the completion of the transaction in June 2021, ASTM holds 51.9% of the Brazilian group and started to consolidate Ecorodovias in its financial accounts from the last quarter of 2021. Overall, Ecorodovias increase the diversification of the group, given that economic cycles in Brazil and Italy are broadly uncorrelated. We estimate that the contribution from Ecorodovias to the consolidated EBITDA of the group will be around 25%-30% over the coming years.

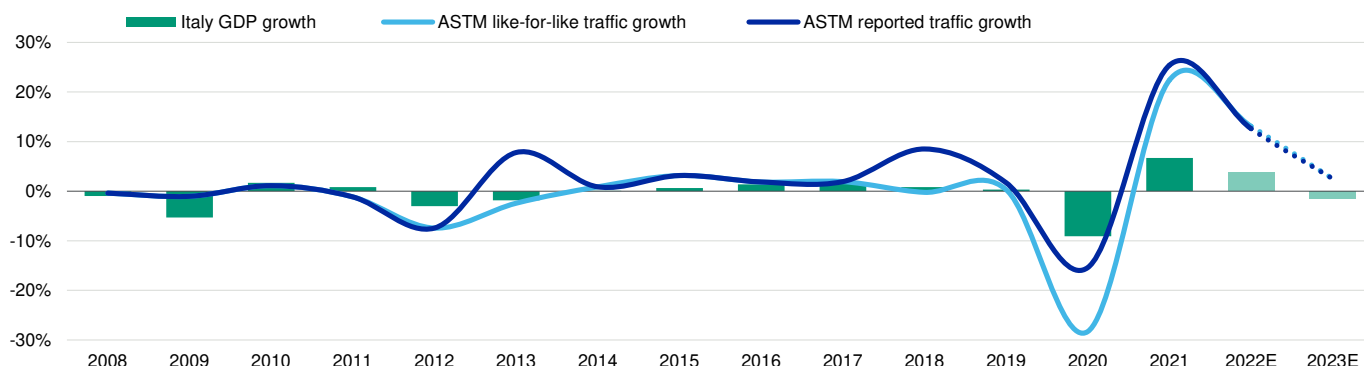
In Italy, the lifting of covid-related restrictions supported traffic recovery but the macroeconomic environment is deteriorating

Before the coronavirus outbreak, ASTM had exhibited a relatively stable traffic profile. In the five years to the end 2019, traffic in ASTM's network increased on average by 1.4% per annum on a like-for-like basis³

Exhibit 8

Traffic growth in ASTM's Italian network is likely to decelerate given weakening macroeconomic conditions

Year-over-year total traffic change vs. Italian GDP growth



Like-for-like traffic excludes traffic growth related to new concessions and significant perimeter changes.

Source: Company, Moody's Investors Service

In response to the coronavirus outbreak, from March 2020, the Italian government imposed a series of travel restrictions and lockdown measures that severely impacted ASTM's traffic and cash flow. Travel restrictions were gradually lifted during the summer period but the increase in coronavirus cases in fall 2020 prompted a second wave of restrictions. Overall, in 2020 traffic across ASTM's Italian network dropped by more than 28% on a like-for-like basis.

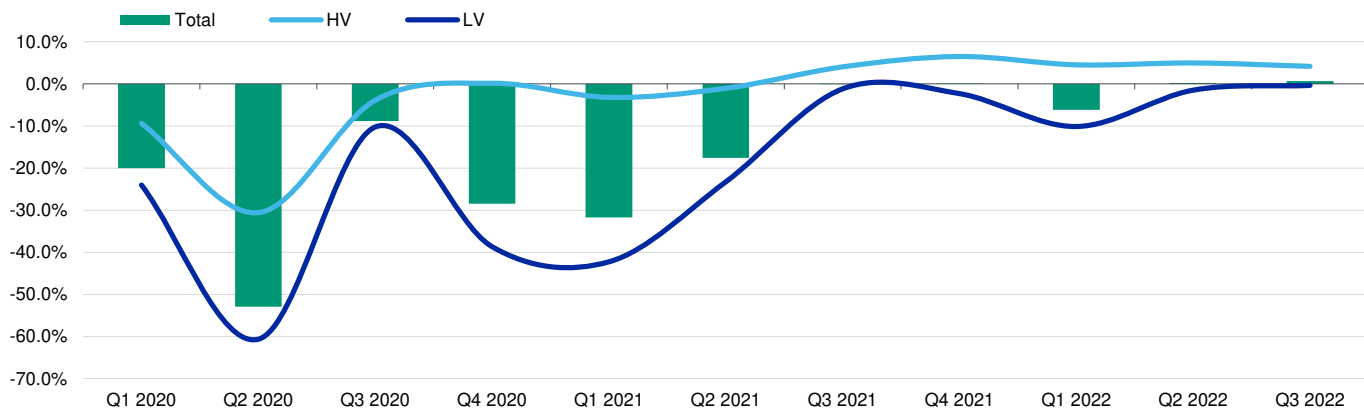
In the first half of 2021, traffic continued to be heavily impacted by travel restrictions and volumes remained more than 24% below those experienced in the same period of 2019. Traffic volumes rebounded relatively quickly during the second half of 2021, mainly driven by higher vaccination rates which prompted a gradual lifting of mobility restrictions across Italy. In the full year 2021, traffic remained around 11% below 2019 levels.

During 2022, the absence of travel restrictions resulted in a continued and more consistent recovery in traffic levels. In the first nine months of 2022, ASTM's like-for-like total volumes were only 1.5% below the same period of 2019.

Exhibit 9

Traffic performance on ASTM's Italian network has exhibited strong recovery since mid 2021

Like-for-like traffic changes from 2019 levels since the beginning of 2020



Like-for-like growth rates are calculated as if ATIVA and SITAF were consolidated from 1 January 2019.

Source: Company, Moody's Investors Service estimates

Heavy goods vehicle (HV) traffic was less affected by lockdown measures than light vehicle (LV) traffic, providing some support to revenue given the higher toll. ASTM traffic has a higher proportion of HV traffic than its European peers, accounting for around 26% of total traffic in 2019, as other means of freight transportation in Italy are not as competitive. In particular, in 2020, HV traffic dropped by 12%, whereas LV traffic decreased by around 34%, on a like-for-like basis. Similarly, in 2021, HV traffic was already 1.6% above

the levels recorded in 2019, while LV traffic was still 16% lower. The trend continued during the first nine months of 2022, when cumulative HV traffic was 4.6% above the same period of 2019 but LV traffic remained some 3.5% below.

Overall, we anticipate traffic on ASTM's Italian network to consolidate its recovery trend by the end of this year, with total volumes and revenues expected to be around pre-pandemic levels. However, the pace of traffic growth beyond 2022 is threatened by the deteriorating macroeconomic environment. In particular, we expect Italy's economy to contract by 1.4% in 2023 as high inflation and tightening monetary policy weighs on consumer purchasing power, reducing aggregate demand and dampening business confidence (for additional details please see [Global Macro Outlook 2023-24 \(November 2022 Update\) - Global economy faces a reckoning over inflation, geopolitics and policy trade-offs](#)). Hence, in 2023, we expect toll road traffic to only modestly increase by around 1% when compared with 2022.

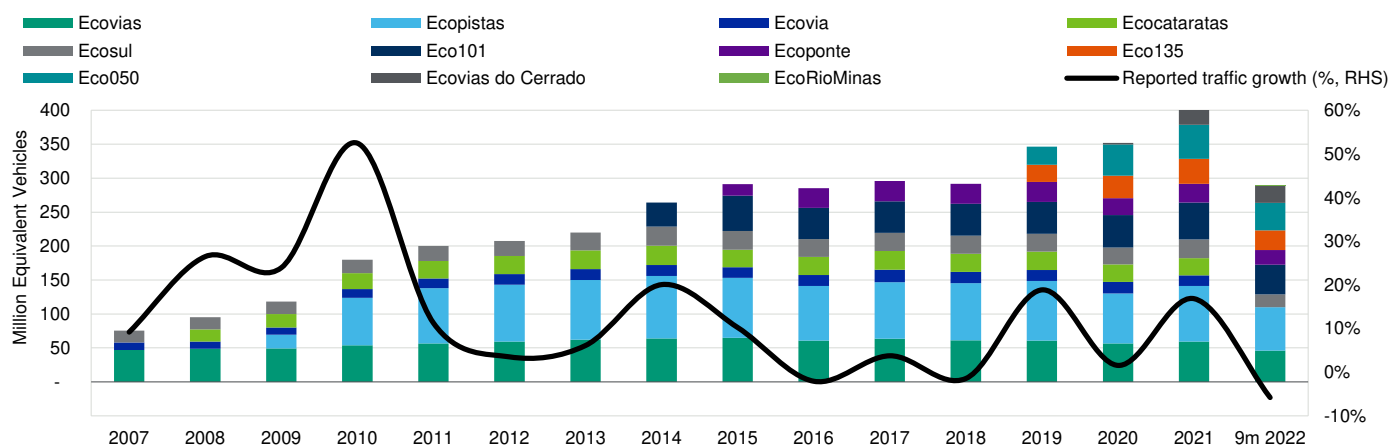
Relatively resilient operating performance of Ecorodovias' network

Aligned with the group's strategy to expand its presence in the toll road business and extend the remaining life of its portfolio, Ecorodovias has been actively adding new assets into its portfolio. Traffic volumes have been growing with new concessions, more recently with the start of operations of Ecovias do Araguaia and EcoRioMinas (2022), Ecovias do Cerrado (2020), and Eco135/Eco050 (2019). On a like-for-like basis, traffic performance has closely followed the GDP growth in Brazil. This is driven by the high proportion of HV traffic in Ecorodovias' network and the fact that HV traffic is mainly driven by the agriculture business, a principal contributor of Brazilian exports.

In 2019, reported traffic volumes increased by around 19%. However, on a like-for-like basis traffic increased by 1%, with LV traffic increasing by 2.7% and HV traffic decreasing by 1%, which was in line with the 1.1% growth in Brazilian GDP that reflected a persistently weak macroeconomic environment.

Exhibit 10

Strong traffic growth in Ecorodovias' network has been mainly driven by new concessions while in 9m 2022 traffic decreased due to the expiration of two concessions



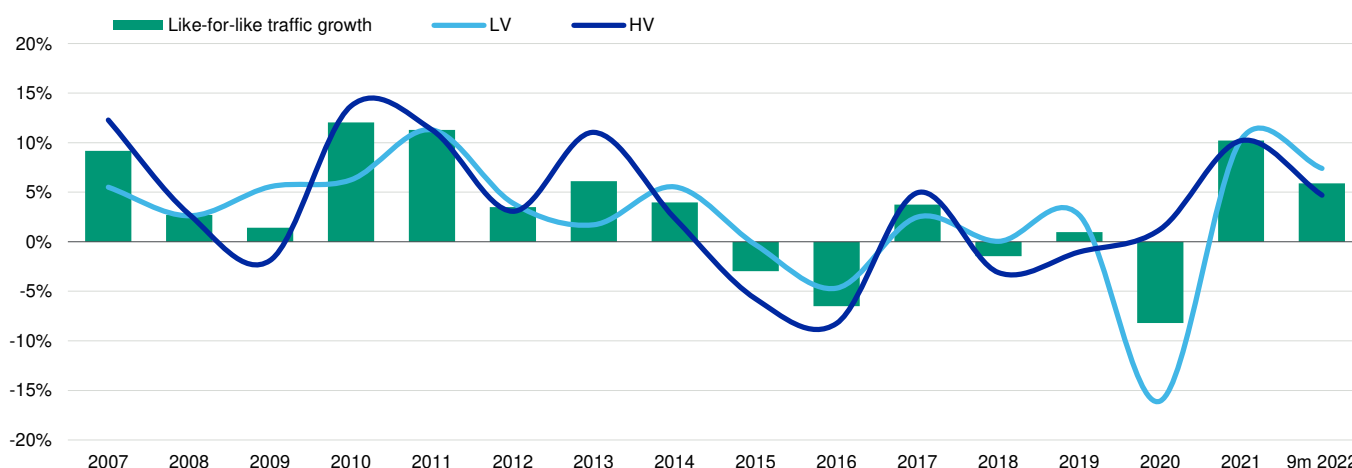
Equivalent paying vehicle is a basic unit of reference in toll collection statistics on the Brazilian market. Light vehicles, such as automobiles, correspond to an equivalent vehicle unit. Heavy vehicles such as trucks and buses are converted to equivalent vehicles by a multiplier applied to the number of axles per vehicle, as established in the terms of each concession agreement.
Source: Company, Moody's Investors Service

In 2020, traffic performance on Ecorodovias' motorway network was less impacted by the coronavirus pandemic because the Brazilian government did not impose travel bans or severe restrictions. While LV traffic declined by around 16% due to social distancing, remote working and other public health measures, HV traffic continued to operate at levels close to those in 2019, since agricultural and industrial activities continued to operate as normal. As a consequence, traffic in 2020 decreased by 8.2% on a like-for-like basis.

In 2021, LV traffic started to rebound, with like-for-like growth of 10.3% versus the previous year, but still 7.2% below 2019. HV performance continued to be very resilient, with like-for-like growth of 10.2% versus the previous year, which was 9.6% above 2019. Overall, in 2021, total traffic in Ecorodovia's network was just 0.1% lower than pre-pandemic levels, mainly driven by the recovery in economic activity in Brazil.

Exhibit 11

Since the economic crisis in Brazil in 2015-2016, traffic performance (on a like-for-like basis) was sluggish until COVID-19 started
Like-for-like annual traffic changes



Like-for-like traffic excludes traffic growth related to new concessions and significant perimeter changes.

Source: Company, Moody's Investors Service

In the first nine months of this year, LV traffic increase on like-for-like basis by 7.4% compared to the same period of 2021, which was still 2.2% lower than pre-pandemic levels. HV traffic also increased by 4.7% versus 2021, reaching 13% above the same period of 2019, on a like-for-like basis. In full-year 2022, we expect traffic on Ecorodovias' network to be around 4% above the pre-pandemic levels. In 2023, we expect total traffic to increase by around 1%-2% versus 2022, driven by the slowdown in the economic activity in Brazil and our expectation that the GDP will grow by just 0.7% next year.

History of political interference and delays impacting due toll increases in Italy

The tariff formula applicable to ASTM's Italian concessions is included in each individual concession contract. While the regulatory framework incorporates well-established concepts, ASTM has historically been subject to regulatory uncertainties and delays in the approval of the economic and financial plans (EFP) and in the corresponding tariff adjustments.

The relevant applicable tariff mechanism incorporates a cost recovery plus capital remuneration principle, with applied tolls reflecting a regulated rate of return on new investments and existing asset base (RAB). To avoid tariff discontinuities, tariff increases originating from capital remuneration factors are smoothed over the relevant tariff period under a financial neutrality principle. Traffic risk, i.e. the difference between the planned traffic curve on which tariffs are calculated and the actual traffic level, is entirely borne by the concessionaire during each five-year tariff period.

In June 2019, the Italian Transport Authority (ART) sanctioned the new tariff framework applicable to all new and existing toll roads concessions. The new framework also incorporates a RAB-based mechanism, but there are some inputs, such as the efficiency factor, that needs to be agreed with the grantor before the approval of the EFP. In addition, changes in the tariff mechanism will need to be reflected through an amendment of the relevant concession agreements. Overall, the impact of the new tariff mechanism is relatively limited for ASTM, given that the existing RAB will continue to earn the same rate of return and only new investments will be remunerated at a different rate.

Nevertheless, since 2020, with the approval of the Decree Law 162/2019, the government froze tariff increases for all concessionaires for which the regulatory period was expired and requested them to present an updated EFP in accordance with the new tariff framework. At the moment, the EFP submitted by some of ASTM's concessions (SALT A15, ADF A6, SAV A5, SITAF A32) has not yet been formally approved by the grantor. Hence, in 2021 and 2022 tariffs continued at the same level as 2019 on the above mentioned concessions and uncertainty remains around the level of toll increases that they will ultimately be entitled to under the new regulatory framework.

Exhibit 12

Historical evolution of toll increases

	2015	2016	2017	2018	2019	2020	2021	2022
SATAP A4	1.50%	6.50%	4.60%	8.34%	0% tariff increase in 2019-2022 period, in line with approved EFP			
SATAP A21	1.50%	0.00%	0.85%	1.67%	Concession expired in 2017			
SALT A12	1.50%	0.00%	0.00%	2.10%	0.00%	Concession expired in 2019		
SALT A15	1.50%	0.00%	0.24%	0.00%	1.86%	0.00%	0.00%	0.00%
ADF A10	1.50%	0.00%	0.00%	0.98%	0.71%	0.00%	0.00%	Concession expired in 2021
ADF A6	1.50%	0.00%	2.46%	2.79%	2.22%	0.00%	0.00%	0.00%
SAV A5	1.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
AT-CN A33	0.00%	0.00%	0.00%	0.00%	0% tariff increase in 2019-2022 period, in line with approved EFP			
AP A21					0.10%	4.88%	3.20%	5.85%
ATIVA		Concession expired in 2016						
SITAF A32							0.00%	0.00%
SITAF T4							0.63%	2.87%
Weighted avg toll increase	1.5%	1.5%	1.4%	3.0%	0.4%	0.3%	0.2%	0.5%

Expired concessions are currently under interim management.

For AT-CN A33 concession no toll increases were due before 2019 given the cross-financing agreement was under discussion. For SAV A5 no toll increases were included in its previous EFP, which expired in 2020, and the company was not able to increase tariffs after the change in framework. For SALT A12 concession, the due toll increase in 2019 of around 6.1% was converted into terminal value (€6.5 million). AP A21 was consolidated in 2018 so previous tariff increases are not applicable. Similarly, ATIVA and SITAF (A32 and T4) concessions were consolidated since 2020 and 2021 respectively.

Source: Company, Moody's Investors Service

Overall, the precedents of political interference on tariff adjustments impact our assessment of the concession and regulatory framework in Italy compared with some other European jurisdictions.

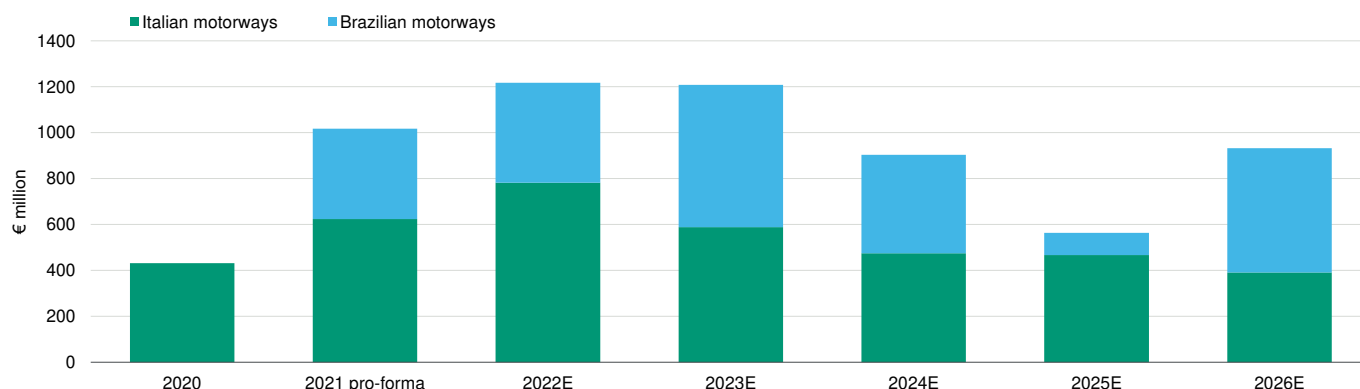
Sizable investment programme in Italy and Brazil associated with recently awarded toll road concessions

ASTM's Italian motorway has a sizable capital expenditure (capex) programme. The company's latest investment plan assumes on average around €500 million of annual capex during 2022-2026 in comparison with an average €300 million executed between 2015-2019. Investments are mostly directed towards the awarded toll road concession, the completion of the AT-CN A33 stretch and improvements on SALT A15, ADF A6 and SITAF. Higher capex further reflects the inflationary pressure on raw materials, as well as the recent introduction of new technical guidelines from the authorities which lead to additional safety investments for the whole sector.

ASTM has historically maintained a large cash position on balance sheet, partly due to the pre-funding strategy of its capex plan, but also reflecting good cash flow generation and a balanced financial policy. In the context of muted tariff increases, we expect ASTM to exhibit negative free cash flows during next year, even if current cash balances of the group will support the planned interventions on the Italian motorways.

Exhibit 13

ASTM's capex plan is likely to remain sizable because of recently acquired concessions and additional safety investments



2021 pro-forma figures include Ecorodovias and SITAF for the whole year.

Source: Company, Moody's Investors Service

The investment programme of Ecorodovias for the period 2022-2026 is expected to amount to around €2.1 billion, with the bulk of the capex concentrated around 2023 and 2026. Investments are mainly driven by committed interventions on the recently awarded concessions. In addition, Eco135 and Eco050, which started operations in 2019, still require somewhat large mandatory investments. We expect that Ecorodovias will finance its investment programme on a standalone basis, through cash flow generation, but also through access to the local capital markets. More broadly, the sizable capex plan for the Brazilian motorways will limit the ability of Ecorodovias to reduce its financial leverage over the coming years.

Significant increase in leverage over the last years

On 20 February 2021, ASTM's main shareholders, Gruppo Gavio and the private equity company Ardian launched a voluntary tender offer on 47.6% shares of ASTM, covering a mix of floating and third-party owned shares. The voluntary tender offer received more than 95% acceptance and as a result, ASTM was delisted from 4 June 2021. Following this transaction, Gruppo Gavio remains the controlling shareholder of ASTM though an indirect equity interest of 50.5% while Ardian holds a 49.5% stake in the group. The shareholders financed the transaction with a €1.9 billion bank loan which was refinanced in November 2021. More generally, given that the main shareholders will remain the same, we don't expect a significant change in the financial policy or governance of the group.

Overall, in 2021, the total amount of gross adjusted debt of the ASTM group increased by €4.5 billion, driven by (1) the additional debt following the consolidation of Ecorodovias; (2) the consolidation of SITAF and its liabilities related to the Fondo Centrale di Garanzia; and (3) the delisting of ASTM. In 2022, we expect gross debt to increase by around €700 million, reaching a total of €8.1 billion, mainly driven by higher investment program.

Given the recovery in traffic performance this year, we expect ASTM's FFO/debt ratio to increase to around 9%-10% in 2022 and to remain around 10%-12% in 2023, which we consider commensurate with a Baa3 rating level. Likewise, we expect that Moody's DSCR should improve from less than 1x in 2021 to around 1.6x by 2023, also supported by the increase in average concession life due to the roll-over of the 'A10 - A12' concession in Italy and the ramp-up of new concessions in Brazil.

ESG considerations

ASTM S.p.A.'s ESG Credit Impact Score is Neutral-to-Low CIS-2

Exhibit 14

ESG Credit Impact Score

CIS-2

Neutral-to-Low

For an issuer scored CIS-2 (Neutral-to-Low), its ESG attributes are overall considered as having a neutral-to-low impact on the current rating; i.e., the overall influence of these attributes on the rating is non-material.



Source: Moody's Investors Service

The ESG Credit Impact Score for ASTM S.p.A. (ASTM) is low to neutral (**CIS-2**), reflecting low environmental and governance risks and moderately negative social risks. The **CIS-2** indicates that ESG attributes are not material to ASTM credit rating.

Exhibit 15

ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

ASTM's environmental risk is low (**E-2**), reflecting the fact that the toll road sector generally faces limited credit impact from environmental risks. ASTM does not have significant exposure to consequences of extreme weather events such as hurricane or floods, thanks to the geographical diversification of its network across Italy and Brazil as well as the size of its managed assets. Whilst the effect of car use on air pollution is gaining increasing attention and could result in restrictions on traffic and car purchases in selected areas, we view traffic volumes as more fundamentally linked to macroeconomic trends, business sentiment, population growth and personal mobility requirements. In addition, the increasing use of electric or hybrid cars acts as a further mitigant, although this may result in increasing investment requirements by toll road operators in additional facilities, such as charging stations.

Social

We assess ASTM's social risk as moderately negative (**S-3** issuer profile score) reflecting its exposure to the risk that public concern over social or affordability issues, particularly in Italy, could lead to adverse regulatory or political intervention. The Italian toll road sector has historically been subject to political interference and in line with other operators, ASTM has been subject to regulatory uncertainties and delays in the approval of the due tariff increases. Customer relations and affordability risks are balanced by neutral to low risks to health and safety, human capital and responsible production.

Governance

ASTM's governance does not pose a particular risk (**G-2** issuer profile). This is supported by neutral-to-low scores on financial strategy and risk management, management credibility and track record, organizational structure and compliance and reporting. Following its delisting in June 2021, ASTM is owned by Gruppo Gavio (50.5%) and the private equity company Ardian (49.5%). While private ownership could increase risk tolerance and translates in moderately negative board structure and policy risks, ASTM's shareholders have historically implemented a balanced financial policy.

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.

Liquidity Analysis

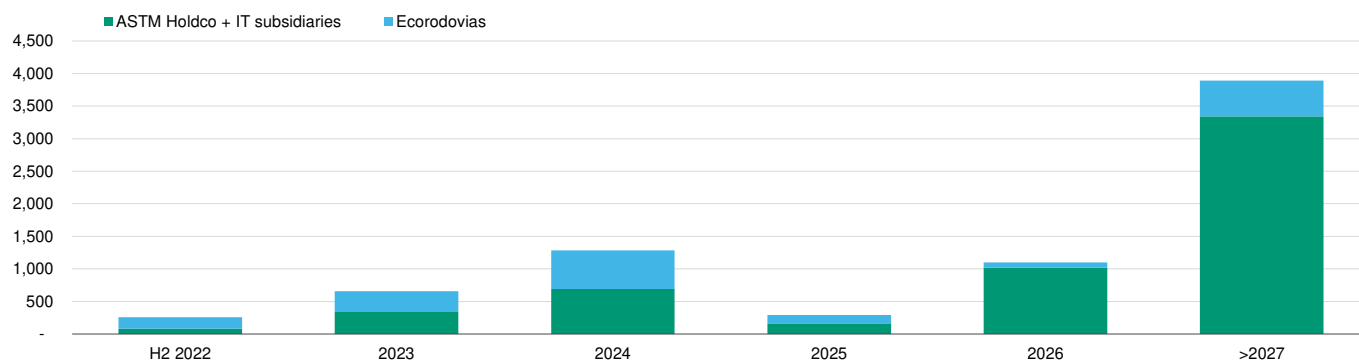
As of June 2022, ASTM's Italian business liquidity position was supported by around 1.4 billion of cash and cash equivalents. In addition, ASTM has a €250 million committed revolving credit facility, of which €200 million is expiring in April 2023 and the remainder in November 2024; a €180 million available term loan maturing in 2027 and a €50 million undrawn capex facility for Autovia Padana expiring in 2033. Overall, we estimate that ASTM's Italian business liquidity availability and internal cash flow generation should allow the company to cover all cash requirements, including investments and debt repayments, for at least the next 12-18 months. We consider ASTM's cash position as a credit positive feature, which supports the current credit profile and we expect that ASTM will maintain a prudent financial policy.

Ecorodovias has an adequate liquidity profile on standalone basis. Over the last year, the group has been successful in extending its maturity profile and improving its liquidity. As of September 2022, following the debt refinancing, the Brazilian group had around BRL2.6 billion of cash. We estimate that Ecorodovias will require additional financing over the next 12-18 months to cover its capital investment requirements and debt repayments. We expect the company to continue to access the debt markets to meet its financing needs in view of the increasing capital spending for the new concessions.

Exhibit 16

ASTM group's debt maturity profile

As of June 2022 (€ million)



Source: Company, Moody's Investors Service

We expect ASTM to continue to maintain adequate headroom against its default covenants in the next 12-18 months. Notably, the majority of ASTM group's debt is not subject to any financial covenant.

Structural Considerations

Prior to the latest update of the EMTN programme in November 2021, ASTM had the option to issue either secured or unsecured notes. At the moment, 26% of the notes under the programme are secured. Secured notes benefit from a first-ranking security interest over the intercompany loans that was used by ASTM to downstream the proceeds of the secured notes to its operating subsidiaries. Also, secured lenders are part of an intercreditor agreement, applying in case of a default and assuring that the proceeds arising from the enforcement of each pledged intercompany loan is shared pro rata and pari passu among all the holders of secured notes and the other classes of secured creditors of ASTM.

We believe that the secured notes issued under ASTM's EMTN program effectively rank pari passu with creditors at the operating subsidiaries level. As a result, we maintain a Baa3 rating on ASTM's EMTN senior secured notes, which is in line with our assessment of the group's consolidated credit strength. We equalised senior unsecured ratings at the Baa3 level, reflecting the progressive concentration of the group's funding at the holding company level, with a consequent reduction of the proportion of external debt located at operating companies. We expect the group to maintain the trend of debt concentration for its Italian operations at the holding company level.

ASTM's EMTN programme includes the option of converting the secured notes into unsecured notes when the ratio of holding company debt-to-consolidated debt reaches at least 85%.

Rating Methodology and Scorecard Factors

ASTM's rating reflects our assessment of the group's overall risk business profile and financial performance, in line with our rating methodology for [Privately Managed Toll Roads](#), published in December 2022.

Exhibit 17

Rating methodology scorecard

ASTM S.p.A

Privately Managed Toll Roads Industry [1][2]			FY 31/12/2021 pro-forma		Moody's Forward View of 2023 As of November 2022 [3]	
Factor 1 : Asset Type and Service Area (25%)			Measure	Score	Measure	Score
a) Asset Type			A	A		A
b) Competing Routes			Aa	Aa		Aa
c) Economic Resilience of Service Area			A	A		A
Factor 2 : Traffic Profile and Performance Trends (15%)						
a) Traffic Profile			A	A		A
b) Track Record and Stability of Tolloed Traffic			Baa	Baa		Baa
Factor 3 : Concession and Regulatory Framework (10%)						
a) Ability and Willingness to Increase Tariffs			Ba	Ba		Ba
b) Protection Provided by the Concession and Regulatory Framework			Ba	Ba		Ba
Factor 4 : Coverage and Leverage (40%)						
a) Cash Interest Coverage			3.4x	Baa	3x - 4x	Baa
b) FFO / Debt			8.5%	Baa	10% - 12%	Baa
c) Moody's Debt Service Coverage Ratio			1.0x	Caa	1.5x - 1.7x	Ba
d) Concession Life Coverage Ratio			1.1x	Caa	1.8x - 2.1x	Ba
Factor 5 : Financial Policy (10%)						
a) Financial Policy			Baa	Baa		Baa
Rating:						
Indicated Outcome before Notching Adjustments				Ba3		Baa3
Notching Adjustments				0		0
a) Scorecard-Indicated Outcome				Ba3		Baa3
b) Actual Rating Assigned						Baa3

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

[2] As of December 2021 pro-forma, which includes Ecorodovias for the whole year (Moody's estimates).

[3] Forward-looking quantitative factor metrics are based on our views for the year 2023. This represents Moody's forward view, not the view of the issuer.

Source: Moody's Financial Metrics

Ratings

Exhibit 18

Category	Moody's Rating
ASTM S.P.A.	
Outlook	Stable
Senior Secured -Dom Curr	Baa3
Senior Unsecured -Dom Curr	Baa3

Source: Moody's Investors Service

Appendices

Exhibit 19

Peer Comparison Table

(in EUR million)	ASTM S.p.A. Baa3 Stable			SANEF S.A. Baa2 Stable			Brisa Concessao Rodoviaria S.A. Baa1 Stable			Autostrade per l'Italia S.p.A. Baa3 Stable		
	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE
	Dec-19	Dec-20	Dec-21	Dec-19	Dec-20	Dec-21	Dec-19	Dec-20	Dec-21	Dec-19	Dec-20	Dec-21
Revenue	2,361	2,415	3,062	1,991	1,585	1,868	648	495	573	3,842	2,960	4,404
EBITDA	746	517	641	1,238	967	1,189	464	327	411	2,068	618	2,142
EBITDA margin %	31.6%	21.4%	20.9%	62.2%	61.0%	63.6%	71.7%	66.0%	71.7%	53.8%	20.9%	48.6%
Funds from Operations (FFO)	586	398	462	831	634	847	327	230	295	1,502	583	986
Total Debt	3,357	3,087	7,588	2,552	2,579	2,166	1,951	1,795	1,757	10,145	10,779	10,685
FFO Interest Coverage	7.4x	5.8x	4.1x	8.5x	6.4x	9.6x	7.2x	5.7x	8.1x	5.4x	2.8x	3.8x
FFO / Debt	17.5%	12.9%	6.1%	32.6%	24.6%	39.1%	16.8%	12.8%	16.8%	14.8%	5.4%	9.2%
FFO / Net Debt	27.2%	18.0%	7.4%	32.7%	28.4%	46.3%	19.0%	13.9%	18.9%	17.6%	6.6%	11.2%
RCF / Capex	1.4x	0.8x	0.7x	1.1x	2.1x	1.3x	6.1x	4.3x	5.3x	1.9x	0.9x	0.9x
RCF / Net Debt	22.7%	17.0%	7.2%	12.4%	14.9%	16.3%	7.9%	5.7%	7.5%	13.8%	6.6%	11.1%

[1] All metrics are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] SANEF metrics refer to HIT consolidated group.

Source: Company, Moody's Investors Service

Exhibit 20

ASTM's adjusted debt breakdown

(in EUR million)	FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-21
As Reported Total Debt	1,233	2,550	2,801	7,434
Pensions	40	44	42	46
Leases	45	0	0	0
Non-Standard Public Adjustments	1,819	763	244	109
Moody's Adjusted Total Debt	3,137	3,357	3,087	7,588

All metrics are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Non-Standard Public Adjustments mainly refer to the reclassification to debt of financial liabilities reflected as other liabilities in ASTM's accounts.

Source: Moody's Financial Metrics

Exhibit 21

ASTM's adjusted EBITDA breakdown

(in EUR million)	FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-21
As Reported EBITDA	797	659	462	643
Unusual Items - Income Statement	(25)	0	0	0
Pensions	(1)	(3)	(2)	(2)
Leases	15	0	0	0
Non-Standard Public Adjustments	(2)	91	56	0
Moody's Adjusted EBITDA	785	5951	517	641

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

Source: Moody's Financial Metrics

Exhibit 22

ASTM's adjusted FFO breakdown

	FYE	FYE	FYE	FYE
(in EUR million)	Dec-18	Dec-19	Dec-20	Dec-21
As Reported Funds from Operations (FFO)	592	564	373	462
Leases	13	0	0	0
Non-Standard Public Adjustments	22	22	26	0
Moody's Adjusted Funds from Operations (FFO)	627	586	398	462

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

Source: Moody's Financial Metrics

Endnotes

- ¹ The €187 million loss registered by Itinera in H1 2022 is driven by the impact of Russian-Ukrainian conflict, which led to issues with procurement and the increase in the price of raw materials, electricity and other commodities and also in the execution of works linked to the Storstroem Bridge project.
- ² Considering Northwest Lot Highway System award in the International Bid n°02/2022, which is expected to sign the formal concession agreement with the grantor in 2023.
- ³ If considering the start of Autovia Padana concession in 2018, traffic grew by 3.4% per annum between 2015-2019.

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