

## CREDIT OPINION

21 December 2023

### Update



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## ASTM S.p.A.

### Annual update to credit analysis

#### Summary

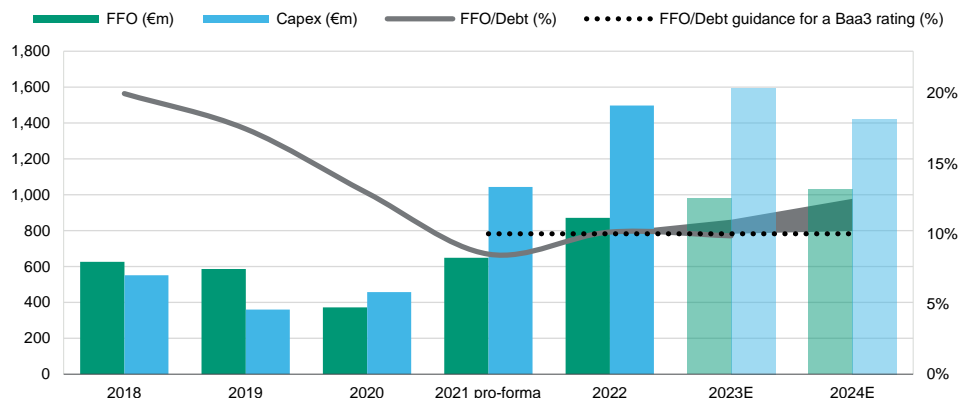
The credit quality of [ASTM S.p.A.](#) (ASTM, Baa3 stable) is underpinned by (1) the strong fundamentals of the group's Italian motorway network, comprising essential transport links in some of the wealthiest regions of [Italy](#) (Baa3 stable); (2) the size and diversification of Ecorodovias Infraestrutura 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 framework in Italy; (2) the relatively large investment programme in Italy and Brazil associated with recently awarded concessions; (3) the significant increase in financial leverage over the past years; and (4) some exposure to higher risk construction and engineering activities, although their contribution to the overall group EBITDA is expected to remain limited.

In 2023, we expect traffic on ASTM's Italian network to growth by around 3% and on Ecorodovias to growth by close to 5%, on a like-for-like basis. While traffic growth will likely decelerate in 2024 due to more muted macroeconomic conditions, we expect ASTM's financial metrics to remain commensurate with a Baa3 rating.

Exhibit 1

**ASTM's financial metrics are expected to remain at 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. 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

## 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, respectively associated with increased safety requirements and 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 pro-forma (1)	Dec-22	Dec-23 E	Dec-24 E
Cash Interest Coverage	7.4x	7.4x	5.8x	3.4x	2.9x	2.7x-2.9x	2.6x-3.3x
FFO / Debt	19.8%	17.3%	12.9%	8.5%	10.1%	10%-11%	10%-12%
Moody's Debt Service Coverage Ratio	1.3x	1.1x	1.1x	1.1x	1.4x	1.5x-1.7x	1.5x-1.7x
Moody's Concession Life Coverage Ratio	1.4x	1.1x	1.2x	1.3x	1.6x	1.8x-2.0x	1.8x-2.0x

(1) 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

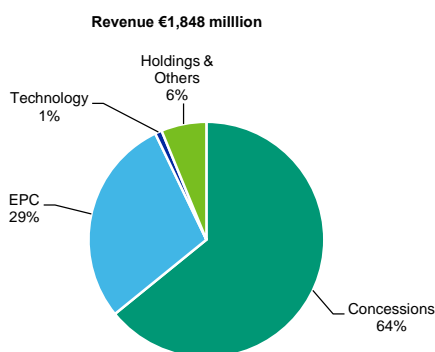
ASTM is the second-largest toll road operator in Italy. The company's consolidated domestic network consists of almost 1,300 km of tolled motorways, representing around 23% of the national network. In Italy, ASTM also holds stakes in two additional motorway concessions with a cumulative length of around 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. Although the contribution to revenue of the EPC sector was around 30% in the first half of 2023, because of its lower profitability, the actual EBITDA contribution is significantly lower, at around 12%.

Exhibit 3

**EPC and other activities represent around 30% of total revenues...**

**ASTM's H1 2023 revenue breakdown**

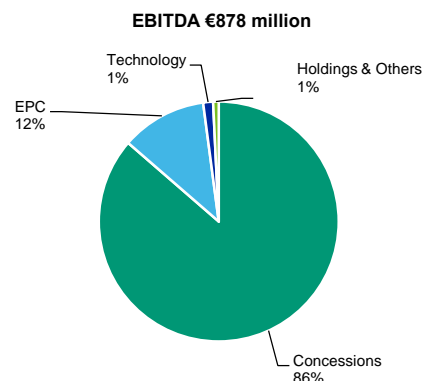


Source: Company, Moody's Investors Service

Exhibit 4

**... but just 12% of the group's EBITDA**

**ASTM's H1 2023 EBITDA breakdown**

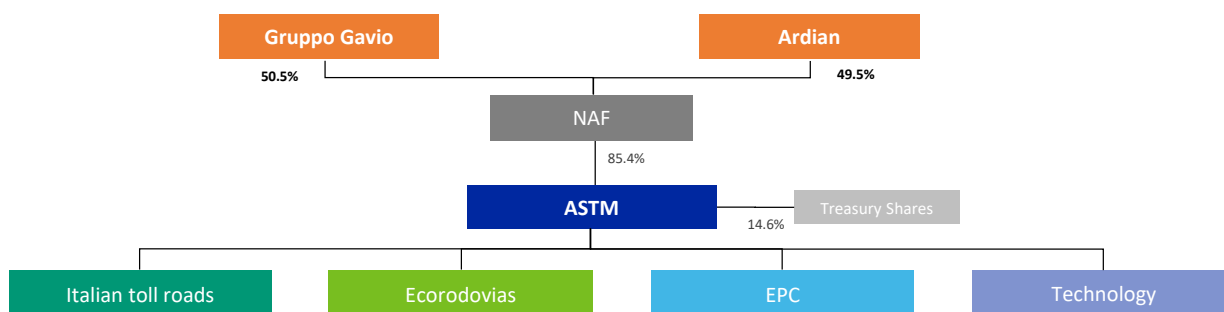


Source: Company, Moody's Investors Service

Following the 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 2022, freight traffic accounted for around 26% of ASTM's domestic traffic (27% in H1 2023). 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 2022 (34% in H1 2023). The second-largest contributor is SALT, concessionaire for the A12 Livorno Sestri, A11 Viareggio Lucca and A15 Fornarola La Spezia, accounting for around 21% of total traffic in 2022 (20% in H1 2023).

In 2020, ASTM increased its stake in Società Italiana Traforo Autostradale del Frejus S.p.A. (SITAF) to a total of 68.1%. 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. In October 2023, after several different legal proceedings and appeals, the Council of State declared the appeal admissible, but ultimately rejected it on the merit. The ruling confirms the exclusion of ASTM's subsidiary from the tender. The motivation of the judgement has not been published as of December 2023. We understand that ASTM will explore any further opportunities for appeal or compensation for damages once the reasons for judgement are issued. Importantly, the awarding of the 'A12-A10' tender is not affected by the above situation, and the handover process is likely to be finalised in the first half of 2024. The new concession for the 'A12-A10' has 11.5 years tenor from the takeover date.

Meanwhile, in line with the Italian legislation, the group continues to operate all the expired concessions 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.

Exhibit 6

### Overview of ASTM's Italian concessions As of June 2023

Concessions	Stake	Extension (Km)	EBITDA (2022, € mln)	Maturity	Estimated gross terminal value (€ mln)	Location
SATAP A4	99.9%	130	146	2026	1090	Piedmont / Lombardy
SATAP A21	99.9%	168	189	2017	380	Piedmont
SALT A12	95.2%	155	105	2019	566	Liguria
SALT A15	95.2%	101	68	2031	-	Emilia - Romagna
ADF A10	73.0%	113	63	2021	485	Liguria
ADF A6	73.0%	131	73	2038	-	Piedmont
SAV A5	71.3%	60	44	2032	-	Valle d'Aosta
AT-CN A33	65.0%	56	42	2031	560	Piedmont
AP A21	51.0%	100	33	2043	-	Lombardy
ATIVA (A5/A4)	72.3%	156	83	2016	293	Piedmont
SITAF	68.1%	94	128	2050	-	Piedmont
<b>Total</b>		<b>1,264</b>	<b>974</b>			

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.

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 2023, the amount of regulatory risk provisions for expired concessions amounted to €670.8 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 around 12 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 December 2023, Ecorodovias' portfolio includes 11 concessions, covering 4,700 kilometers of toll roads located in the Southeast, Midwest and Northeast of Brazil. Ecorodovias also operates and maintains a port company located in the port of Santos, Ecoporto<sup>1</sup>.

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 56% in freight traffic and 44% in leisure and commuter traffic in 2022 (58% and 42% in the first six months of 2023, expressed in equivalent vehicles). 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 15 years as of December 2022, with maturities ranging from 2026 to 2056. With the ramp-up of operations of Ecovias do Araguaia, EcoRioMinas and EcoNoroeste during 2023 we expect that average concession life of Ecorodovias will increase to around 19 years at the end of this year, which supports the long-term cash flow profile and credit metrics of the group.

In August 2023, Ecorodovias started a "friendly devolution" process to either transfer back to the government the Eco101 concession or to renegotiate the terms. The framework is designed to facilitate a bona fide solution to stressed concessions. We understand that the intention of the company is to renegotiate the agreement terms and to keep the concession, still exploring the devolution in case the preferred option is not achievable.

Exhibit 7

**Overview of Ecorodovias' concessions**

As of June 2023

Concessions	Extension (Km)	EBITDA* (2022, BRL mln)	Maturity	Location	Type of concession	Regulator
Ecovias	177	943.7	2034	São Paulo	State	ARTESP
Ecopistas	144	243.9	2039	São Paulo	State	ARTESP
Ecosul	457	294.8	2026	Rio Grande do Sul	Federal	ANTT
Eco101	479	85.1	2038	Espirito Santo	Federal	ANTT
Ecoponte	29	99.4	2045	Rio de Janeiro	Federal	ANTT
Eco135	364	245.9	2048	Minas Gerais	State	SETOP
Eco050	437	194.5	2044	Minas Gerais / Goiás	Federal	ANTT
Ecovias do Cerrado	437	85.7	2050	Minas Gerais / Goiás	Federal	ANTT
Ecovias do Araguaia	851	25.8	2056	Tocantins / Goiás	Federal	ANTT
EcoRioMinas	727	37.4	2052	Rio de Janeiro / Minas Gerais	Federal	ANTT
EcoNordeste	601	0.0	2053	São Paulo	State	ARTESP
<b>Total</b>	<b>4,703</b>	<b>2,256</b>				

\*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, EcoNordeste 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 capitalise 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, because 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 30%-35% over the coming years.

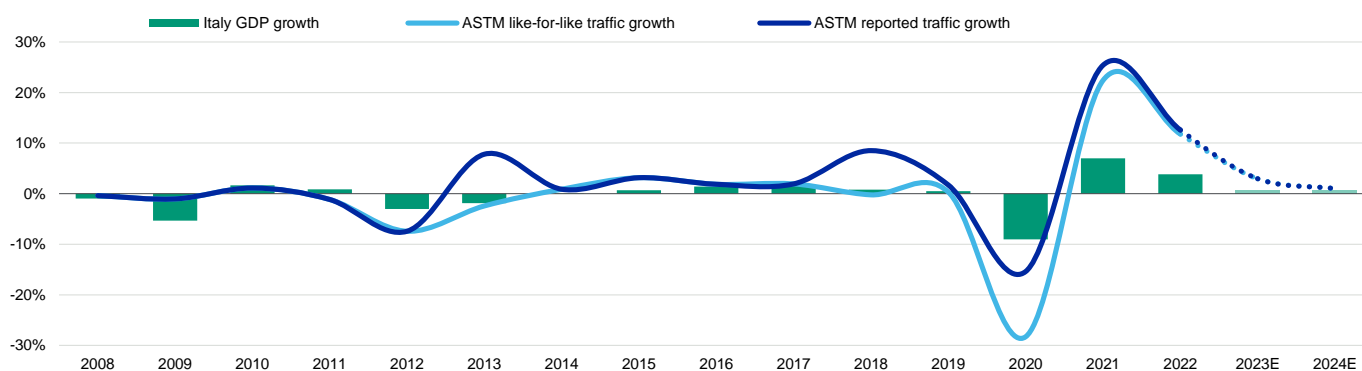
### Strong volumes on the Italian network in 2023, but softening in economic conditions will decelerate traffic growth in 2024

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 basis<sup>2</sup>

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

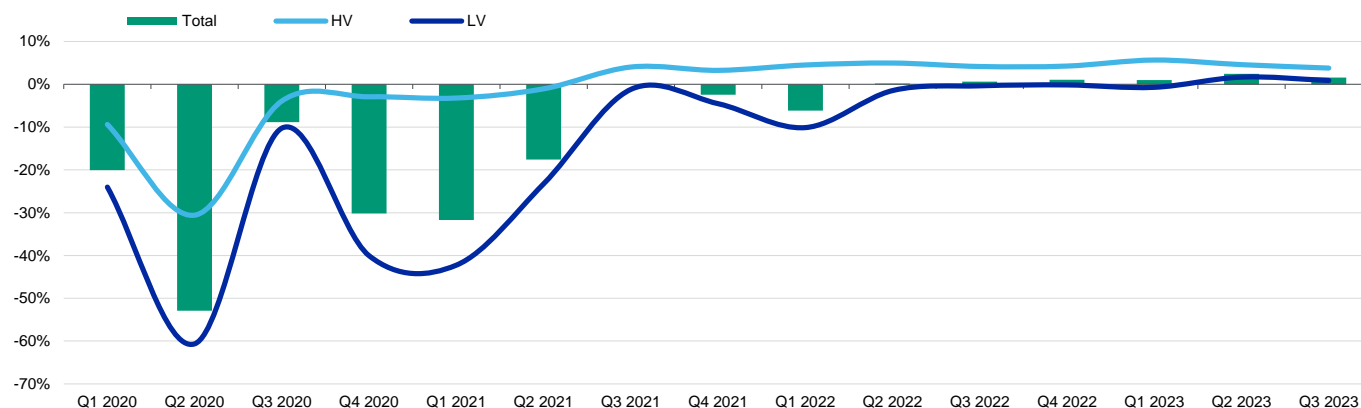
However, in 2020 traffic was significantly affected by travel restrictions and lock-down measures and volumes across ASTM's Italian network dropped by more than 28% on a like-for-like basis. In 2021, traffic continued to be heavily impacted by travel restrictions. Even if there was a gradual lifting 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. As a result, in 2022 ASTM's like-for-like total volumes were just 1.5% below 2019 levels.

The growth path continued this year, with traffic increasing by around 4.7% with the first half of 2023 versus the same period in 2022. Considering the already strong performance in the second half of 2022, which sets a higher baseline for comparison, we anticipate that the full year 2023 traffic level will be almost 3% above 2022 and around 2% above 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

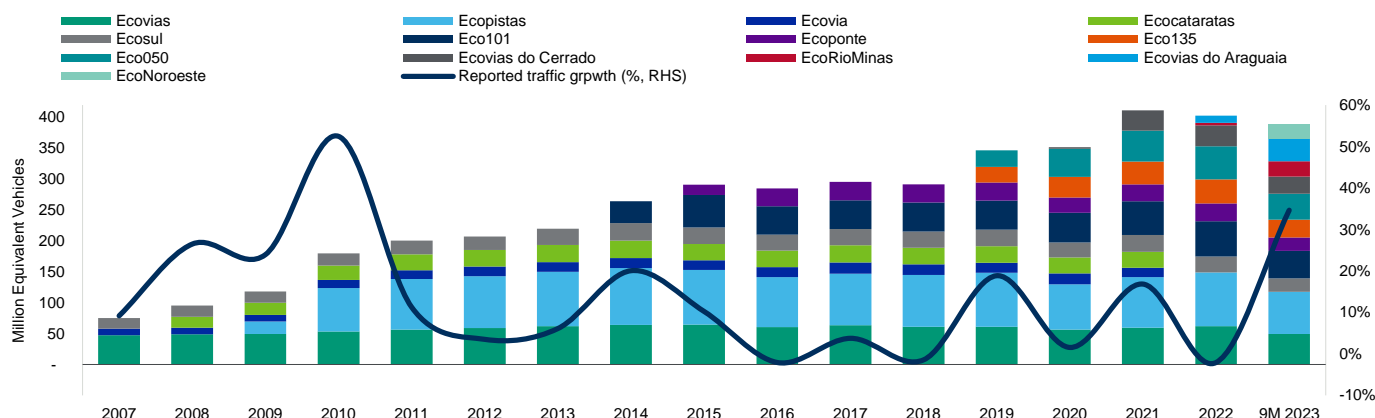
ASTM traffic has a higher proportion of heavy goods vehicle (HV) traffic than its European peers, accounting for around 26% of total traffic in 2019, as other means of freight transportation in Italy are not as competitive. In 2020 and 2021, HV traffic was less affected by lockdown measures than light vehicle (LV) traffic, providing some support to revenue given the higher toll. The trend continued in 2022, although attenuated by the overall recovery: HV traffic was around 4.5% higher than in 2019, while LV was still 2.7% below pre-pandemic level. In 2023, expect LV growth outpacing HV growth, with around 3.5% and around 1% respectively versus 2022.

In 2024, we expect total traffic growth will slowdown to around 1% when compared to 2023. We forecast a relatively weak [GDP growth in Italy](#) of about 0.8% in 2024. High interest rates and cost of living pressures will continue to dampen consumer and business confidence, limiting further growth of both LV and HV traffic (for additional details please see [Toll Roads – Europe: 2024 Outlook - Stable driven by modest tariff increases and slowing traffic growth](#)).

**Good performance in 2023 on the existing Ecorodovias' network, outlook boosted by new concessions**

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, EcoRioMinas (end of 2022) and EcoNoroeste (2023). 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.

Exhibit 10

**Strong historical traffic growth driven by new concessions, with a slight decline in 2022 due to the expiration of two concessions**

Equivalent paying vehicle is a basic unit of reference in toll collection statistics in Brazil. LVs, such as automobiles, correspond to an equivalent vehicle unit. HVs, 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.

9M 2023 growth rate reflects the comparison with the same period in 2022.

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%, HV traffic continued to operate at levels close to those in 2019. Hence, total 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 2020, but still 7.2% below 2019. HV performance continued to be very resilient, with like-for-like growth at 9.6% above 2019. Overall, in 2021, total traffic in Ecorodovia's network was just 0.1% lower than pre-pandemic levels.

In 2022, traffic increased on a like-for-like basis by 4.7% compared to 2021, with LV and HV reporting respectively a 5.8% and 3.8% increase.

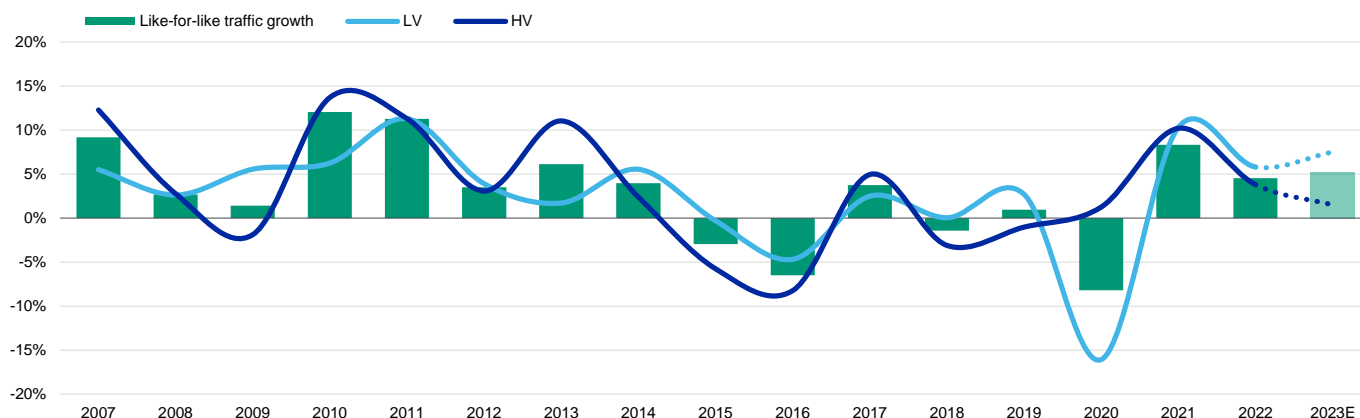
The growth trend continued this year, with a 5.2% like-for-like traffic growth in the first nine months of 2023 compared with 2022, driven by a 7.9% LV traffic increase and a 3.2% HV traffic increase. The growth was driven by the performance of soybean and corn exports, the increase in services activity and favourable weather conditions.

The growth in reported traffic, including the network expansion with the start of operations and toll collection by EcoRioMinas, Ecovias do Araguaia and EcoNoroeste, was close to 35% for the first nine months of the year over the same period of 2022.

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

### History of political interference and delays impacting 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 a new tariff framework applicable to all new and existing toll roads concessions, which also incorporates a RAB-based mechanism, but with 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, because 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, until 2023 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	2023		
SATAP A4	1.50%	6.50%	4.60%	8.34%	0% tariff increase in 2019-2022, in line with approved EFP					4.30%	
SATAP A21	1.50%	0.00%	0.85%	1.67%	Concession expired in 2017						
SALT A12 (Tirreno from 2024)	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%	0.00%		
ADF A10 (Tirreno from 2024)	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%	0.00%		
SAV A5	1.50%	0.00%	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, in line with approved EFP					4.30%	
AP A21					0.10%	4.88%	3.20%	5.85%	9.16%		
ATIVA	Concession expired in 2016										
SITAF A32							0.00%	0.00%	0.00%		
SITAF T4							0.63%	2.87%	7.36%		
Weighted avg toll increase	1.5%	1.5%	1.4%	3.0%	0.4%	0.3%	0.2%	0.5%	1.9%		

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. A10 and A12 are due to be transferred to Concessioni del Tirreno during 2024.

Source: Company, Moody's Investors Service

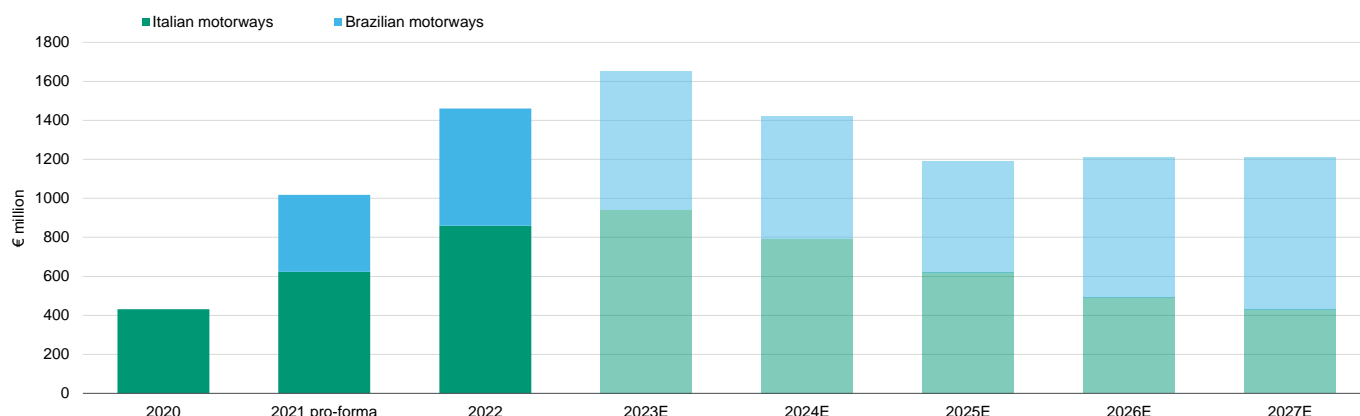
Overall, the precedents of political interference on tariff adjustments impact our assessment of the concession and regulatory framework in Italy compared with some other European jurisdictions.

### Sizeable investment programme in Italy and Brazil associated with enhanced safety requirements and recently awarded toll road concessions

ASTM's Italian motorway has a sizeable capital expenditure (capex) programme. The company's latest investment plan assumes on average around €570 million of annual capex during 2024-2027 in comparison with an average €300 million executed between 2015-2019. Investments are mostly directed towards the completion of the AT-CN A33 stretch and improvements on ADF A6, SALT A15, as well as the investment plan of A10 and A12 moving to Concessioni del Tirreno. Higher capex further reflects the inflationary pressure on raw materials, as well as the recent introduction of new technical guidelines from the authorities which led 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. We expect ASTM to exhibit negative free cash flow in 2024, 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 sizeable 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 2024-2027 is likely to amount to around BRL15 billion (equivalent to €2.7 billion). Investments are mainly driven by committed interventions on the recently awarded concessions (Ecovias do Cerrado, EcoRioMinas, Ecovias do Araguaia, EcoNoroeste). In addition, Eco135 and Eco050, which started operations in 2019, still require somewhat large mandatory investments. We expect that Ecorodovias to finance its investment programme on a standalone basis, through cash flow generation, but also through access to the local capital markets. More broadly, the sizeable 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.

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 2023, we expect gross debt to increase by around €1.1 billion, reaching a total of €9.9 billion, mainly driven by higher investment program. Hence, we expect ASTM's FFO/debt ratio to remain at around 10% in 2023 and around 10%-12% in 2024. Nevertheless, we expect that Moody's DSCR will improve to around 1.5x in 2023, 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.

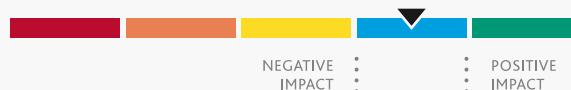
## ESG considerations

### ASTM S.p.A.'s ESG credit impact score is CIS-2

Exhibit 14

#### ESG credit impact score

# CIS-2



ESG considerations do not have a material impact on the current rating.

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

ENVIRONMENTAL

## E-2



SOCIAL

## S-3



GOVERNANCE

## G-2



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.

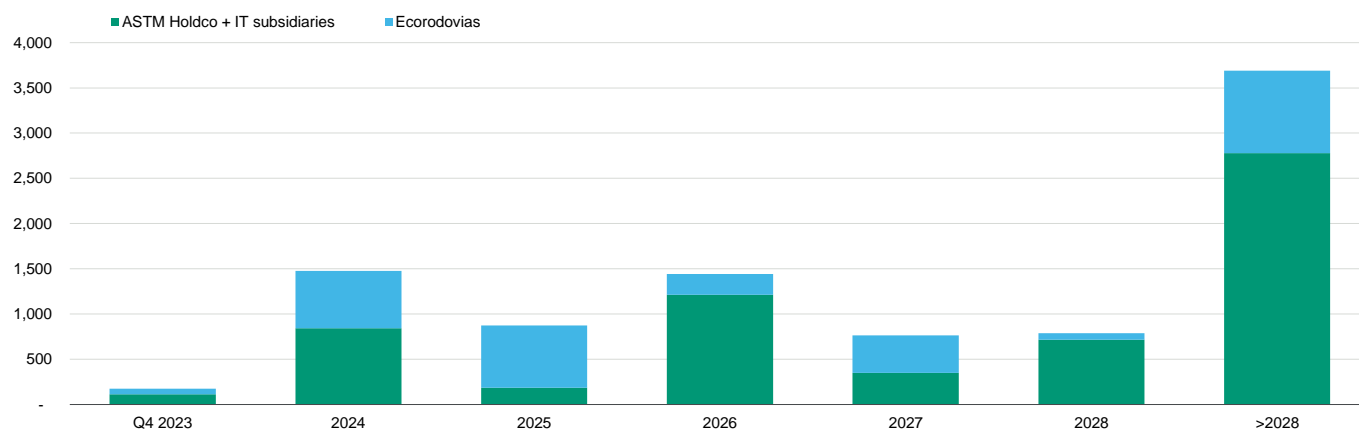
## Liquidity Analysis

As of September 2023, ASTM's Italian business liquidity position was supported by around €1.6 billion of cash and cash equivalents. In addition, ASTM maintains a €500 million back-up facility, majority of which expires in 2028; and a €350 million backstop facility, which was contracted for one year in July 2023 and contains an optional six months extension at the company's discretion. 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.

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 2023, the Brazilian group had around BRL3.3 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 September 2023 (€ million)



Source: Company, Moody's Investors Service

As of September 2023, the ASTM's debt was almost equally split between fixed and variable rate. Excluding Ecorodovias, which bears entirely floating or index-linked debt, around 74% of ASTM's debt was fixed rate.

Overall, we consider ASTM's liquidity as a credit positive feature, which supports the current credit profile. In addition, we expect that ASTM will maintain a prudent financial policy, in line with its track record.

## Structural Considerations

Prior to the 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 31/12/2022		Moody's Forward View of 2023 As of December 2023 [3]	
Factor 1 : Asset Type and Service Area (25%)	Measure	Score	Measure	Score	Measure	Score
a) Asset Type	A	A		A		A
b) Competing Routes	Aa	Aa		Aa		Aa
c) Economic Resilience of Service Area	A	A		A		A
Factor 2 : Traffic Profile and Performance Trends (15%)						
a) Traffic Profile	A	A		A		A
b) Track Record and Stability of Tolloed Traffic	Baa	Baa		Baa		Baa
Factor 3 : Concession and Regulatory Framework (10%)						
a) Ability and Willingness to Increase Tariffs	Ba	Ba		Ba		Ba
b) Protection Provided by the Concession and Regulatory Framework	Ba	Ba		Ba		Ba
Factor 4 : Coverage and Leverage (40%)						
a) Cash Interest Coverage	2.9x	Baa	2.7x - 3.0x	Baa		
b) FFO / Debt	10.1%	Baa	10% - 11%	Baa		
c) Moody's Debt Service Coverage Ratio	1.4x	Ba	1.5x - 1.7x	Ba		
d) Concession Life Coverage Ratio	1.6x	B	1.8x - 2.0x	Ba		
Factor 5 : Financial Policy (10%)						
a) Financial Policy	Baa	Baa		Baa		
Rating:						
Indicated Outcome before Notching Adjustments		Baa3		Baa3		
Notching Adjustments		0		0		
a) Scorecard-Indicated Outcome		Baa3		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 2022 [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
<b>ASTM S.P.A.</b>	
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. A3 Stable			Autostrade per l'Italia S.p.A. Baa3 Stable		
	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE
	Dec-20	Dec-21	Dec-22	Dec-20	Dec-21	Dec-22	Dec-20	Dec-21	Dec-22	Dec-20	Dec-21	Dec-22
Revenue	2,415	3,062	4,499	1,585	1,868	2,014	495	573	665	2,960	4,404	4,625
EBITDA	461	641	1,131	967	1,167	1,338	327	411	509	618	2,142	2,492
EBITDA margin %	19.1%	20.9%	25.1%	61.0%	62.4%	66.4%	66.0%	71.7%	76.6%	20.9%	48.6%	53.9%
Funds from Operations (FFO)	398	462	871	634	847	1,008	230	295	354	583	986	1,251
Total Debt	3,089	7,907	8,606	2,579	2,157	1,966	1,795	1,757	1,590	10,779	10,685	11,389
FFO Interest Coverage	5.8x	4.1x	2.9x	6.4x	9.6x	22.3x	5.7x	8.1x	8.5x	2.8x	3.8x	4.5x
FFO / Debt	12.9%	5.8%	10.1%	24.6%	39.3%	51.3%	12.8%	16.8%	22.3%	5.4%	9.2%	11.0%
FFO / Net Debt	18.0%	7.0%	12.0%	28.4%	46.6%	58.7%	13.9%	18.9%	24.6%	6.6%	11.2%	13.8%
RCF / Capex	0.8x	0.7x	0.6x	2.1x	1.3x	1.5x	4.3x	5.3x	5.0x	0.9x	0.9x	0.5x
RCF / Net Debt	17.0%	6.9%	11.9%	14.9%	16.3%	19.9%	5.7%	7.5%	10.3%	6.6%	11.1%	5.5%

[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	FYE Dec-22
<b>As Reported Total Debt</b>	2,799	3,076	2,803	7,753	8,565
Pensions	40	44	42	46	41
Leases	45	0	0	0	0
Non-Standard Adjustments	279	264	244	109	0
No Adjustments	0	0	0	0	0
<b>Moody's Adjusted Total Debt</b>	3,163	3,385	3,089	7,907	8,606

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

	FYE	FYE	FYE	FYE	FYE
(in EUR million)	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22
<b>As Reported EBITDA</b>	797	659	462	643	1,130
Unusual Items - Income Statement	(25)	0	0	0	0
Pensions	(1)	(3)	(2)	(2)	1
Leases	15	0	0	0	0
<b>Moody's Adjusted EBITDA</b>	787	656	461	641	1,131

All metrics are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. In accordance with Moody's definitions, EBITDA does not incorporate any provisions.

Source: Moody's Financial Metrics

Exhibit 22

## ASTM's adjusted FFO breakdown

	FYE	FYE	FYE	FYE	FYE
(in EUR million)	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22
<b>As Reported Funds from Operations (FFO)</b>	592	564	373	462	871
Leases	13	0	0	0	0
Non-Standard Adjustments	22	22	26	0	0
<b>Moody's Adjusted Funds from Operations (FFO)</b>	627	586	398	462	871

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 Ecoporto concession was due to expire at the end of 2023. However, the company is discussing the renewal with the Santos Port Authority (APS), which [granted a 180-day extension](#) to the concession until June 2024 to guarantee operational continuity during the renewal negotiations
- 2 If considering the start of Autovia Padana concession in 2018, traffic grew by 3.4% per annum between 2015-2019.

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