MOODY'S INVESTORS SERVICE

CREDIT OPINION

24 September 2020

Update

Rate this Research

RATINGS

Fluvius System Operator CV

Domicile	Belgium
Long Term Rating	A3
Туре	LT Issuer Rating - Dom Curr
Outlook	Negative

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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Fluvius System Operator CV

Update following outlook change to negative

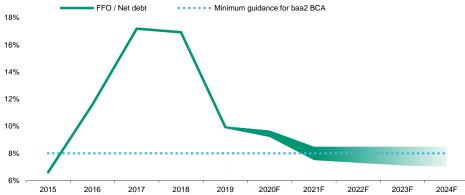
Summary

Exhibit 1

The robust credit quality of <u>Fluvius System Operator CV</u> (Fluvius, A3 negative) reflects that of the 11 intermunicipal utility companies, which own the company and severally guarantee its liabilities. The regulated electricity and gas distribution network operations of the DSOs in the Flemish region of Belgium, have a low business risk, supported by a regulatory framework that is generally supportive and transparent, although relatively new and untested in the context of European regulated network peers, following the transition of tariff-setting responsibilities from the national to regional regulators in 2014.

The outlook for Fluvius was changed from stable to negative, reflecting our expectation that, absent mitigating measures, the cash-flow based metrics for the Fluvius Economic Group may not meet the guidance for the current rating over the next regulatory period starting 2021 as a result of the recently announced decision of the VREG, the economic regulator of the Fluvius Economic Group, which will result in a reduced remuneration of the Regulated Asset Base (RAB) and more demanding operating efficiencies. The decrease in earnings, combined with the increase in investment requirements to support the energy transition, including smart metering, as well as the currently expected level of dividend payments will lead to an increase in net debt which may result in metrics falling short of the guidance for the current rating.

Fluvius' fund from operations (FFO) / net debt metrics may fall below guidance in the 2021-24 regulatory period



Financial metrics for 2015-17 are for Eandis Economic Group and metrics for 2018-20 are for Fluvius Economic Group, which combine the financial profiles of the operating company and its DSO owners.

All figures and ratios are calculated using Moody's estimates and standard adjustments. Moody's Forecasts (f) or Projections (proj.) are Moody's opinion and do not represent the views of the issuer.

Source: Moody's Investors Service

In assessing Fluvius' overall credit risk, we also take into account the fact that the <u>Community of Flanders</u> (Aa2 stable) holds a strong interest in maintaining a solid financial standing for the DSOs, given their essential role in the Flemish economy.

Credit strengths

- » A strong link with the Community of Flanders through the provision of essential energy network services
- » Strong underlying business-risk profile from operation of monopoly network assets
- » Transparent and generally supportive regulatory framework, but relatively short track record, with the tariff responsibility transferred from the national to regional regulators in 2014
- » Conclusion of merger with lower-geared Infrax bolstered the group's financial profile with net debt/fixed assets expected to remain around 60%

Credit challenges

- » The 150 basis-point decrease in allowed returns on historical RAB, the suppression of remuneration on revaluation surpluses over 8 years and additional efficiency requirements will pressure earnings from 2021
- » An adverse allocation of regulatory balances led to lower tariffs and cash-flows in 2019-20
- » A material step-up in capital spending and a continuing high dividend payout, which will weigh on financial flexibility
- » An exposure to higher-risk activities outside of core regulated energy network businesses, although it will remain limited to 10% of group earnings

Rating outlook

The outlook is negative, reflecting our expectation that, absent mitigating measures, cash-flow based financial metrics will fall below the guidance for the current rating i.e., funds from operations (FFO) / net debt may fall below 8%, in the next regulatory period starting 2021.

Factors that could lead to an upgrade

A rating upgrade is unlikely in the near term given the expected decrease in earnings in the next regulatory period starting in 2021.

However, the outlook could be changed to stable if the company was able to maintain FFO / net debt of at least 8% and net debt / fixed assets less revaluation surpluses were to remain below 80%. This could arise from (1) mitigating the increase in leverage via a change in its dividend policy, or (2) getting significant support from the advances mechanism introduced in the regulatory determination for the period 2021-24 so that cash-flows are maintained.

Factors that could lead to a downgrade

We could downgrade the ratings if metrics of the Fluvius Economic Group appeared unlikely to meet the requirements for the current ratings, namely FFO / net debt were to fall below 8% or net debt / fixed assets less revaluation surpluses was to be above 80%.

The ratings may also come under downward pressure if we assessed that there is a lower probability of support from the Community of Flanders or if its rating was downgraded.

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.

Key indicators

Exhibit 2

Fluvius System Operator CV

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	2020 proj.	2021-24 proj.
FFO Interest Coverage	3.0x	4.5x	6.4x	6.8x	4.4x	4.4x	4-5x
Net debt / Fixed Assets	81.4%	77.6%	69.4%	57.2%	58.5%	60%	60%-65%
FFO / Net Debt	6.6%	11.6%	17.2%	16.9%	9.9%	9-10%	7%-8.5%
RCF / Net Debt	3.7%	8.9%	13.8%	12.8%	5.6%	5% - 6%	4%-6%

Financial metrics for 2015-17 are for Eandis Economic Group and metrics for 2018-20 are for Fluvius Economic Group, which combine the financial profiles of the operating company and its DSO owners.

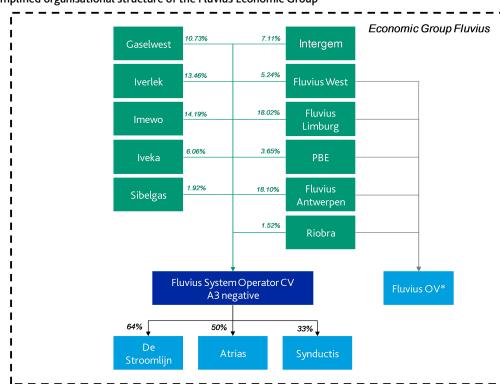
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Source: Moody's Investors Service

Profile

Fluvius System Operator CV (ex Eandis System Operator CVBA) is a Belgian utility established in March 2006, which manages the regulated activities of the operating electricity and gas distribution networks in the Flemish Region in Belgium. Fluvius was formed through the merger of Eandis and Infrax in July 2018 and is 100% owned by the municipalities in the Flemish Region. Fluvius, together with its 11 utility shareholders, form the Fluvius Economic Group, which derived around 97% of its operating profit from the regulated energy distribution activities in 2019, with the remaining 3% derived predominantly from regulated sewage and contract-based cable television network operations. The group also holds small district heating infrastructure in selected areas.





Simplified organisational structure of the Fluvius Economic Group

* Fluvius OV employs all ex-Infrax statutory employees since 1 April 2019

Several mergers among utility shareholders took place in April 2019: IMEA, Iveg and Integan formed Fluvius Antwerpen; Inter-aqua, Inter-energa and Inter-media formed Fluvius Limburg; and PBE and Intergas merged (PBE).

Source: Fluvius, Moody's Investors Service

Detailed credit considerations

Transparent regulatory framework, but somewhat less predictable and limited track record

The federal state and each of the Belgian regions have established their own regulatory body for the electricity and gas market with complementary competencies, with the national regulator Commission for Electricity and Gas Regulation (CREG) principally responsible for tariff setting in respect of the DSOs and the regional regulators for licensing issues. As part of a decentralisation of powers from the federal to the regional governments, on 1 July 2014, the responsibility for setting electricity and gas distribution tariffs passed from the CREG to the regional regulators, that is, the VREG in the Flemish Region (see Exhibit 4).

To allow for the orderly transfer of tariff-setting responsibilities, the CREG had agreed with all DSOs, in April 2012, that tariffs for the regulatory period 2009-12 would be carried forward into 2013 and 2014 (including an option to extend into 2015 if necessary).





Overview of Belgian energy distribution market and regulatory responsibilities

Source: Fluvius, Moody's Investors Service

While the regulatory approach, introduced by VREG in 2015, has a relatively short track record, the tariff-setting principles follow wellestablished precedents from other European jurisdictions. The final tariff methodology for the third regulatory period, starting 1 January 2021, was published in August 2020.

Tariffs are determined through a revenue-cap model (compared with cost-plus arrangements until 2014) and, in setting the revenue allowance, which drive annual tariffs, the VREG distinguishes among three cost categories: (1) noncontrollable (or exogenous) costs, which include transmission network fees, taxes or recovery of regulatory accounting balances, are passed on directly to consumers; (2) controllable (or endogenous) costs, which include typical revenue-building blocks, such as allowances for operating costs, depreciation of the regulated asset base and a return based on the weighted average cost of capital; and (3) other cost items, including fines or accounting measures.

The current regulatory period spans 2017-20, and compared with the 2015-16 transitory period, VREG decided to cut the allowed return by around 120 basis points, but in turn also allowed a more timely recovery of noncontrollable costs.

Following a consultation process started in May 2020 (see: <u>Fluvius System Operator CV: Proposed cut in allowed return will be credit</u> <u>negative if implemented</u>, 18 May 2020), the VREG published in August 2020 its final determination for the regulatory period 2021-24 in which the allowed return was cut by a further 150 basis points, mostly due to the decrease in the risk-free rate (exhibit 5).

Weighted average cost of capital (WACC) has been reduced mostly due to the low interest rate environment

	VREG (2015-16)	VREG (2017-20)	VREG (2021-24)		
Risk-free rate	3.30%	3.04%	2.11%		
Risk premium	1.20%	0.64%	0.58%		
Transaction fee	0.15%	0.15%	0.15%		
Cost of debt (historical)	4.65%	3.83%	2.84%		
Risk-free rate	2.00%	0.80%	0.09%		
Risk premium	1.20%	0.61%	0.85%		
Transaction fee	0.15%	0.15%	0.15%		
Cost of debt (new)	3.35%	1.56%	1.09%		
Historical: new debt ratio	60:40	65:35	60:40		
Cost of debt (allowed)	4.13%	3.04%	2.14%		
Premium for ECB purchase		0.63%	0.00%		
Market risk premium	5.10%	5.01%	4.81%		
Asset Beta	0.33	0.38	0.39		
Equity Beta	0.73	0.76	0.83		
Equity risk premium	3.74%	3.79%	3.99%		
Cost of equity (post-tax)	5.74%	5.24%	4.08%		
Cost of equity (pre-tax)	8.70%	7.94%	5.44%		
Gearing	55.00%	60.00%	60.00%		
DSO tax rate until 31 Dec 2014	0.00%				
WACC (nominal, post-tax)	4.85%	3.92%	2.92%		
Tax rate from 1 Jan 2015	33.99%	33.99%	25.00%		
WACC (nominal, pre-tax)	6.18%	5.00%	3.50%		

Note: the risk-free rate for new debt and equity is calculated as a weighted average of the 10-year German Bund and the 10-year Belgian OLO (25:75 over one-year period for 2017-20 and for 2021-24); the risk-free rate for historical debt is calculated as a weighted average of the same bonds (25:75 over 10 years for 2017-20, over the 2010-16 period for 2021-24. Note 2: the WACC was updated to 4.9% in 2018 and 2019 and 4.8% in 2020 to reflect the decrease in corporate tax to 29.58% and 25%, respectively. *Source: VREG, Moody's Investors Service*

While the general regulatory approach for the next regulatory period is largely consistent with the current approach, some changes have been introduced including:

» The RAB has been split between "historical cost" (residual value of historical acquisition cost) RAB and revaluation surpluses which represented c. 20% of total RAB in 2019. While historically both have been earning the same return (WACC), the revaluation surpluses' returns will decrease from the 3.5% WACC in 2021 to zero after 8 years. While the lower WACC on revaluation surpluses only represents a loss of around €45 million in 2021-24 earnings, we see this change as resulting in a somewhat less predictable regulatory environment.

Exhibit 5

- » The exposure to volume and revenue risk has been reduced through several channels, including (1) the full recovery of difference in permitted income from difference in volumes distributed through regulatory balances; (2) a smoother and faster recovery of regulatory balances arising during the period (see below) leading to a lower volatility of revenues; and (3) the introduction of a capacity-based tariff for electricity from 2022 which will reduce the exposure to volumes of electricity distributed to end-customers.
- » An advance mechanism has been introduced by the regulator in which some projects could receive an allowance in permitted income to maintain financial stability in the context of high investment requirements. The eligible projects, duration and potential interests rate of the advance mechanism are still to be defined.
- » A quality incentive (q-factor) will be introduced into the revenue formula to reflect asset performance and customer service and ensure that companies do not deliberately postpone investment spending to the detriment of asset quality. Each DSO's q-factor will be published by the VREG with the 2021 tariff and will be derived from the 2017-19 reported performance. We expect the impact to be marginal on Fluvius as the q factor is a zero-sum incentive.
- » Some special financial incentives could be added to the tariff formula. Those can be positive, negative or symmetric incentives and will be published by the regulator at a later date.
- » Introduction of an x"-factor (frontier shift) of 0.4% to the regulator formula for gas distribution which corresponds to additional annual productivity improvements to be achieved.

The x'-factor introduced in 2019 for expected cost synergies resulting from the merger between Eandis and Infrax will be maintained in order to reach net cost-savings of €109 million per annum by 2024.

Regulator's decision on 2010-14 regulatory balances, recoveries of historical regulatory receivables and several years of under-recovery lead to regulatory liabilities since 2018

During the transition between national and regional regulators, cost allowances were not updated and Eandis accumulated tariff deficits of €450 million. Under-recovered revenue from 2008-09 (around €100 million) has been included within the agreed tariffs for 2015 and 2016, while the recovery of the 2010-14 deficits (around €350 million) was included in the tariffs for 2016-20. During 2015 and 2016, Eandis accumulated further regulatory receivables of around €260 million and €54 million, respectively, linked primarily with exogenous, that is, noncontrollable costs.

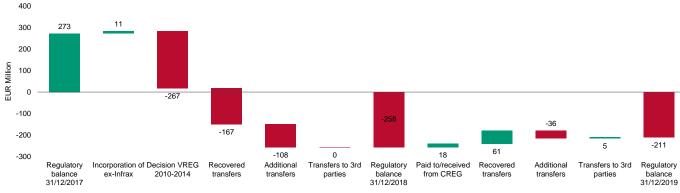
Following the final tariff methodology for the 2017-20 period, all outstanding regulatory receivables will be recoverable by end-2020. In 2017, Fluvius recovered around \notin 79 million of 2008-14 receivables and \notin 166 million from outstanding 2015 balances. It also accrued negative balances of \notin 69 million (which means an over-recovery in 2017). Therefore, overall outstanding regulatory balances reduced to around \notin 273 million as of 31 December 2017, roughly in line with expectations.

In April 2018, the VREG formulated a proposal to allocate the balances of the manageable costs for 2010-14 to the tariff (that is, the end customer). Following a public consultation, the VREG decided the size and destination of the regulatory balances: all noncontrollable costs are to be returned to the tariff, controllable costs for 2010-11 will be allocated 50% to the DSO and 50% to the tariff, while all controllable costs for 2012-14 will be allocated to the tariff. Fluvius appealed the decision but the Brussels Court of Appeal ruled in favour of the VREG in February 2019.

As a result, Fluvius recorded a loss of ≤ 267 million in 2018 and will not be able to recover the sums in their entirety as it had planned. This allocation has resulted in a cut in tariffs for 2019 and 2020, which represents a decrease in the annual allowed revenue of ≤ 137 million for Fluvius.

Following the allocation of the 2010-14 balance, the recovery of some receivables during the year and the regulatory deficits accumulated in 2018, Fluvius recorded a regulatory liability on its balance sheet as of 31 December 2018 (see Exhibit 6).

Exhibit 6



Evolution of regulatory transfers and balances during 2018 and 2019

Source: Fluvius, Moody's Investors Service

The regulatory balances remaining at the end of 2020 will consist of balances accrued during the period 2017-20 and will be paid back 50% in 2021 and 50% in 2022. The regulatory determination for 2021-24 provides for less volatility in revenues through a simplification of the recovery process of regulatory balances. All new regulatory balances arising in 2021-2024 will be recovered or paid back through the tariff over 2 years: those arising from the re-indexation of the basic part of endogenous costs will be phased 50% in y +1 and 50% in y+2 and all other regulatory balances reported by the DSOs (in y+1) will be recovered 50% in y+2 and 50% in y+3.

Accelerated cash inflows from green and cogeneration certificates temporarily boosted metrics

Fluvius held a sizeable portion of renewable energy and cogeneration certificates, which the company is obliged to buy from generators but was subsequently unable to sell in a timely manner because of insufficient demand from energy suppliers. An amendment to the Energy Act in 2016 introduced a surcharge on user tariffs to allow recovery of the costs for unsold certificates over 2017-21. The moneys collected from the surcharge are being used by the Flemish Energy Authority to purchase the DSOs' outstanding renewable certificates at a maximum amount of €15 million per year for each DSO.

However, the overall recovery of green certificates in 2017 and 2018 surpassed our previous expectations, because an agreement at the European level allowed a larger number of these certificates to be bought. The sales were also bolstered by increased green certificate requirements for energy suppliers and, together with ongoing auctions, most of the historical balances were redeemed at year-end 2018.

As a result of the cancellation of the mechanism allowing extra payouts for the recovery of certificates, the balance of receivables as of year-end 2019 was €58.7 million. In the future, the costs for green and cogeneration certificates will still be recoverable through the grid tariff. No significant build-up of certificates is expected in the future because the number of certificates bought by the DSOs more or less equals the number of certificates they can sell.

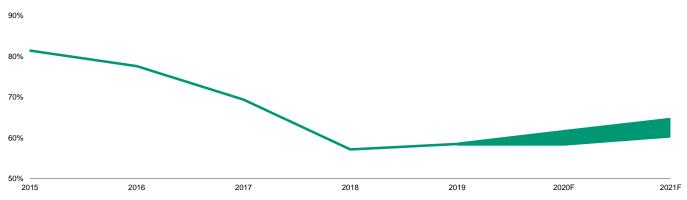
Regulatory recoveries and merger with lower-geared Infrax improved the financial profile

Since the 2014 debt-funded exit of Electrabel as a shareholder, Eandis' credit quality has been constrained by relatively high gearing, with net debt/fixed assets close to 80%, and FFO/net debt in the high-single digits in percentage terms.

Following the accelerated recovery of green certificates in 2017 and 2018, financial metrics of the Fluvius Economic Group improved significantly. In addition, the DSOs that owned Infrax have historically had a much stronger credit quality than Eandis' owners. For example, the Infrax Economic Group reported leverage, measured as net debt/fixed assets, of around 30%-35% for the four years before the merger. The merger assisted the reduction of Fluvius' leverage as illustrated by its net debt/fixed assets of 58.5% as of 31 December 2019.

Exhibit 7

Regulatory recoveries and merger with Infrax have led to a significant improvement in Fluvius' financial profile Historical and projected net debt/fixed assets



Financial metrics for 2014-17 are for Eandis Economic Group, and metrics for 2018-20 are for Fluvius Economic Group, which combine the financial profiles of the operating company and its DSO owners.

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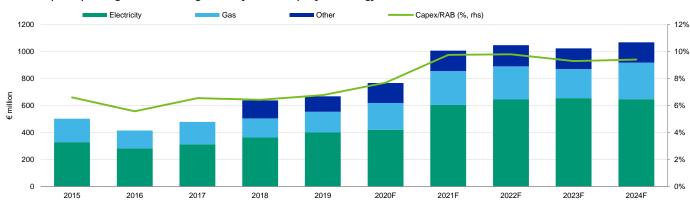
Sources: Fluvius, Moody's Investors Service

We expect the Fluvius Economic Group to maintain an average gearing in line with the regulatory assumption of 60:40 debt:equity, which will most likely be met through an increase in the gearing of ex-Infrax DSOs at that level.

A material step-up in capital spending and high dividend payout will weigh on the financial flexibility

The company forecasts a material increase in its future capital spending of around ≤ 1 billion per year. This compares with capital spending of c. ≤ 700 million in 2019. This increase in capital spending takes place in the context of the region's energy transition, which includes a significant investment in smart meters for a total of ≤ 1.6 billion with an investment horizon for full roll-out shortened from 15 years to 9 years with a target of 80% of meters installed by 2025.

Most of Fluvius' investments will be in its regulated electric and gas distribution networks businesses, which will increase the company's RAB (including smart meters).



Fluvius' capital spending will increase significantly to accompany the energy transition

Data for 2014-17 are for Eandis Economic Group, and metrics for 2018-20 are for Fluvius Economic Group, which combine the financial profiles of the operating company and its DSO owners.

Moody's Forecasts (f) or Projections (proj.) are Moody's opinion and do not represent the views of the issuer. Sources: Fluvius, Moody's Investors Service

Exhibit 8

The impact of the higher capital expenditure required by the Fluvius Economic Group on its debt could be mitigated by the introduction of an advance mechanism in the next regulatory period starting 2021. More details will be published by the regulator on the timing and size of the cash-flows related to these advances when an advance has been agreed by the regulator.

The Fluvius Economic group has been paying large dividend to its shareholders in recent years with €289 million in 2019 and €267 million in 2018, with a dividend payout in excess of 80% of net income for the last 3 years. Fluvius' future dividend policy, in the light of the lower revenues and higher capital expenditure over the next regulatory period, will be an important factor in determining likely credit metrics.

Final ratings incorporate two notches of rating uplift

The DSOs which comprise the Fluvius Economic Group and act as guarantors of Fluvius' debt are owned by the municipalities in the Flemish Region. Consequently, Fluvius and the Fluvius Economic Group fall within the scope of our <u>Government-Related Issuers</u> rating methodology, published in February 2020.

The final A3 rating incorporates two notches of uplift from the Fluvius Economic Group's standalone credit quality, expressed as a Baseline Credit Assessment of baa2, taking into account (1) the credit quality of the Community of Flanders; (2) our assessment that there is a strong probability of the Community providing support to the DSOs and/or its shareholding municipalities if either were in financial distress; and (3) a high level of default dependence (that is, the degree of exposure to common drivers of credit quality) because of the entirely domestic operations of the Fluvius Economic Group and its close association with its owners and the region.

The Community of Flanders (1) is ultimately responsible for the organisation of the electricity and gas market and for the distribution of energy within the Flemish Region, which is considered a public service; and (2) would be indirectly affected by any difficulties (including financial problems) experienced by the entities entrusted with this task. Consequently, the Community of Flanders is deemed to be the supporting entity for the purposes of the Government Related Issuers rating methodology.

ESG considerations

The European Union (EU) has committed to reduce greenhouse gas emissions by 40% from the 1990 levels and to increase the contribution of renewables to energy demand to 27% by 2030. These targets, agreed in 2014, formed the basis of the EU's Nationally Determined Contributions incorporated into the Paris Agreement, and are designed to significantly decarbonise the region's economies. Electric networks will require the sector to connect new renewable generation on the grid and adapt to the increased electrification of the economy.

Transmission and distribution utilities and networks are confronted with increasing investment needs as well as changing operating paradigms to accommodate the growing share of renewables and to create a "smart grid". While improving the resilience of the grid, a credit positive, this investment brings execution risk and weighs on credit metrics, besides potentially creating affordability concerns. In addition, small scale generation, self-supply and energy efficiency may decrease volumes significantly and challenge the large scale network model. Decarbonisation is raising questions about the long-term future of gas distribution utilities in some developed countries. Fluvius' exposure to environmental risk is in line with its sector. It has a central role in the energy transition of Flanders as a facilitator, mainly on the side of electricity through the increasing number of connections of renewable capacity on the network and its project of LED public lighting worth €450 million of capex over 2020-24.

Fluvius has a low exposure to the coronavirus pandemic

The rapid and widening spread of the coronavirus pandemic, the deteriorating global economic outlook, falling oil prices and asset price declines are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. We regard the coronavirus pandemic as a social risk under our environmental, social and governance (ESG) framework, given the substantial implications for public health and safety.

Measures to counter the spread of the virus have resulted in lower-than-expected electricity consumption in the first half of 2020, which resulted in a decrease in network load (distribution volumes) and, hence, lower collected revenue for network activities. The regulated nature of Fluvius' DSO activities mitigates the impact on the company's performance because it benefits from a regulatory framework which allows for the recovery of the difference in revenues arising from volume differences.

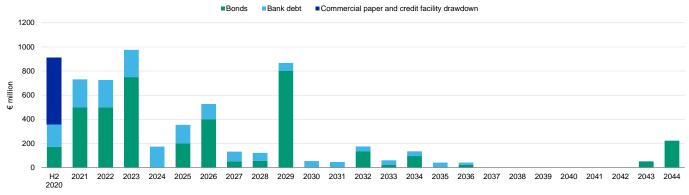
Government restrictions, self-isolation and higher levels of staff sickness may have delayed the planned delivery of network operators' investment programmes. However, we expect the impact to be manageable for Fluvius.

Liquidity analysis

Following the strong cash flow generation in recent years on the back of regulatory receivable recoveries, Fluvius' liquidity had improved. However, the decrease in allowed revenue, increased reliance on short-term debt combined with the increase in capital spending and a high dividend payout, will require a continuous access to capital markets.

Exhibit 9

Debt maturity profile for the Fluvius Economic Group At 30 June 2020



Source: Fluvius, Moody's Investors Service

Aside from ongoing cash flow generated from the utilities' monopoly network activities, the economic group's primary sources of committed liquidity are revolving credit facilities in an aggregate amount of \leq 425 million (\leq 200 million of which is committed until December 2020 and the rest renewed annually). \leq 68 million were drawn on these facilities as of 30 June 2020.

Fluvius has been increasingly relying on its commercial paper programme, and the €500 million available under the programme was fully issued as of 30 June 2020. It is noted that this is in conjunction with the relatively short-term maturities of undrawn credit facilities, leading to Fluvius' liquidity depending on continuous access to capital markets, although Fluvius currently retains good access to these markets.

Methodology and scorecard

Fluvius is rated in accordance with the rating methodologies for <u>Regulated Electric and Gas Networks</u>, published in March 2017 and <u>Government-Related Issuers</u>, published in February 2020.

Exhibit 10 Rating factors Fluvius System Operator CV

Regulated Electric and Gas Networks Industry [1][2]	Curre FY 12/31		Moody's 12-18 Month Forward Vie As of September 2020 [3]		
Factor 1 : Regulatory Environment and Asset Ownership Model (40%)	Measure	Score	Measure	Score	
a) Stability and Predictability of Regulatory Regime	А	A	A	А	
b) Asset Ownership Model	Aa	Aa	Aa	Aa	
c) Cost and Investment Recovery (Ability and Timeliness)	A	A	A	А	
d) Revenue Risk	A	A	Aa	Aa	
Factor 2 : Scale and Complexity of Capital Program (10%)					
a) Scale and Complexity of Capital Program	A	A	Baa	Baa	
Factor 3 : Financial Policy (10%)					
a) Financial Policy	Ва	Ba	Ва	Ва	
Factor 4 : Leverage and Coverage (40%)					
a) FFO Interest Coverage (3 Year Avg)	5.9x	Aa	4x - 5x	А	
b) Net Debt / Fixed Assets (3 Year Avg)	60.8%	Baa	60% - 65%	Baa	
c) FFO / Net Debt (3 Year Avg)	14.5%	Baa	7.5% - 10%	Ва	
d) RCF / Net Debt (3 Year Avg)	10.5%	Baa	4% - 6%	Ва	
Rating:					
a) Scorecard-Indicated Outcome		Baa1		Baa2	
b) Actual BCA Assigned				baa2	
Government-Related Issuer				Factor	
a) Baseline Credit Assessment				baa2	
b) Government Local Currency Rating				Aa2 STA	
c) Default Dependence				High	
d) Support				Strong	
e) Actual Rating Assigned				A3	

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

[2] As of 12/31/2019.

[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate any significant acquisitions or divestitures.

Historical metrics are based on three-year average including metrics for Eandis Economic Group for 2017 and Fluvius Economic Group for 2018 (which included the contribution of Eandis for 12 months and of Infrax for 6 months) and 2019.

Source: Moody's Financial Metrics™

Ratings

Exhibit 11

Category	Moody's Rating
FLUVIUS SYSTEM OPERATOR CV	
Outlook	Negative
Bkd Issuer Rating -Dom Curr	A3
Bkd Senior Unsecured -Dom Curr	A3
Source: Moody's Investors Service	<i>H</i>

Appendix

Exhibit 12

Peer comparison

Numbers presented for the Fluvius Economic Group

	Fluvius	Fluvius Economic Group		Terega SA		2i Rete Gas S.p.A.			RESA S.A.			
	A	A3 Negative		Baa2 Stable		Baa2 Stable		A2 Stable				
(in EUR million)	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE	FYE
	Dec-17	Dec-18	Dec-19	Dec-17	Dec-18	Dec-19	Dec-17	Dec-18	Dec-19	Dec-16	Dec-17	Dec-18
Revenue	2,652	2,944	2,991	471	476	500	591	674	714	264	281	289
EBITDA	1,274	1,435	1,020	314	297	325	425	480	518	121	129	137
Total Assets	8,667	14,328	15,060	1,832	1,959	1,992	4,165	4,800	4,535	1,467	1,484	1,486
Total Debt	5,516	6,444	6,765	1,416	1,485	1,493	2,886	3,380	3,046	576	568	575
Net Debt	5,484	6,423	6,700	1,398	1,470	1,468	2,070	2,693	2,693	533	531	552
FFO / Net Debt	17.2%	16.9%	9.9%	15.5%	14.2%	13.8%	14.2%	13.5%	12.6%	16.7%	17.9%	19.4%
RCF / Net Debt	13.8%	12.8%	5.6%	10.0%	8.8%	9.1%	10.1%	10.3%	9.2%	7.7%	12.9%	13.8%
(FFO + Interest Expense) / Interest Expense	6.4x	6.8x	4.4x	5.9x	5.6x	4.3x	4.9x	7.1x	6.4x	9.0x	11.8x	14.2x
Net Debt / EBITDA	4.3x	4.5x	6.6x	4.5x	5.0x	4.5x	4.9x	5.6x	5.2x	4.4x	4.1x	4.0x

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™

Exhibit 13 Debt adjustment breakdown

Numbers presented for the Fluvius Economic Group

	FYE	FYE	FYE	FYE	FYE	FYE
(in EUR million)	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19
As Reported Total Debt	6,049.7	6,161.2	6,011.1	5,446.6	6,123.6	6,336.8
Pensions	187.9	174.1	38.5	25.5	265.3	427.8
Leases	47.2	43.8	43.3	43.1	55.1	0.0
Non-Standard Public Adjustments	13.1	11.1	0.5	0.3	0.3	0.2
Moody's Adjusted Total Debt	6,297.8	6,390.2	6,093.3	5,515.6	6,444.4	6,764.8
Cash & Cash Equivalents	(8.9)	(3.7)	(2.7)	(31.4)	(21.7)	(64.6)
Moody's Adjusted Net Debt	6,288.9	6,386.5	6,090.6	5,484.1	6,422.7	6,700.2

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™

Exhibit 14

Selected Moody's adjusted historical financials Numbers presented for the Fluvius Economic Group

	FYE	FYE	FYE	FYE	FYE	FYE
(in EUR million)	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19
INCOME STATEMENT						
Revenue	2,418.6	2,315.7	2,454.3	2,651.9	2,943.7	2,991.5
EBITDA	674.5	777.6	1,046.0	1,273.8	1,434.8	1,020.2
EBIT	376.0	474.8	753.6	983.2	1,077.4	601.6
Interest Expense	202.6	210.7	201.9	173.3	186.1	194.1
BALANCE SHEET						
Total Debt	6,297.8	6,390.2	6,093.3	5,515.6	6,444.4	6,764.8
Net Debt	6,288.9	6,386.5	6,090.6	5,484.1	6,422.7	6,700.2
Total Liabilities	7,578.0	7,766.5	7,565.1	6,727.3	8,467.9	8,719.9
Net Property Plant and Equipment	7,792.8	7,844.3	7,847.3	7,902.2	11,237.4	11,453.1
Total Assets	9,649.8	9,003.6	8,977.8	8,666.6	14,327.6	15,059.8
CASH FLOW						
Funds from Operations (FFO)	520.1	422.7	709.1	942.9	1,087.8	665.2
Cash Flow From Operations (CFO)	(325.1)	1,293.6	770.3	1,207.4	1,053.8	741.3
Dividends	190.2	185.6	165.8	185.4	266.6	289.2
Retained Cash Flow (RCF)	329.9	237.0	543.4	757.5	821.2	375.9
Capital Expenditures	(464.7)	(401.0)	(344.8)	(396.2)	(521.9)	(625.4)
Free Cash Flow (FCF)	(980.0)	706.9	259.7	625.8	265.4	(173.4)
FFO / Net Debt	8.3%	6.6%	11.6%	17.2%	16.9%	9.9%
RCF / Net Debt	5.2%	3.7%	8.9%	13.8%	12.8%	5.6%
FCF / Net Debt	-15.6%	11.1%	4.3%	11.4%	4.1%	-2.6%
PROFITABILITY						
EBIT margin %	17.5%	20.5%	30.7%	37.1%	36.6%	20.1%
EBITDA margin %	31.4%	33.6%	42.6%	48.0%	48.7%	34.1%
INTEREST COVERAGE						
FFO Interest Coverage	3.6x	3.0x	4.5x	6.4x	6.8x	4.4x
LEVERAGE						
Debt / EBITDA	9.3x	8.2x	5.8x	4.3x	4.5x	6.6x
Net Debt / EBITDA	9.3x	8.2x	5.8x	4.3x	4.5x	6.6x
Debt / Book Capitalization	72.8%	80.6%	77.9%	71.6%	50.6%	50.4%
Net Debt / Fixed Assets	80.7%	81.4%	77.6%	69.4%	57.2%	58.5%

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™

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