

Article Title: ARCHIVE | Guidance | Criteria | Corporates | Industrials: Applying "Corporate Methodology: Ratios & Adjustments" Data: (EDITOR'S NOTE: —This article is no longer current. It has been superseded by "Guidance: Corporate Methodology: Ratios And Adjustments," published April 1, 2019.) Overview And Scope 1. This guidance document provides additional information and guidance relating to our criteria article "Corporate Methodology: Ratios And Adjustments" (R&A;), published on Nov. 19, 2013. S&P; Global Ratings intends this report to be read in conjunction with that criteria. For further explanation of guidance documents, please see the description at the end of this document. Key Publication Information Original publication date: Feb. 6, 2018 We may revise this guidance from time to time if the operational track record of tower master service agreements or market dynamics warrant re-evaluating the variables we generally use to adjust for such arrangements, or when market dynamics warrant re-evaluating the variables we generally use to discount a long-term liability. Guidance Adjustment to debt for the deemed repatriation liability under the 2017 revised U.S. corporate tax code 2. In accordance with R&A;, we make analytical adjustments for certain implicit financing arrangements that we view as debt-like. Under the adjusted debt principle (see paragraphs 20-29 of R&A;), items that we add to reported debt include incurred liabilities that provide no future offsetting operating benefit. The deemed repatriation liability that the 2017 revised U.S. corporate tax code creates for U.S. corporate issuers is such a liability in our view. We will therefore typically include this liability, where material, in our adjusted debt. Under the new tax law, companies that are subject to the repatriation liability may pay it in one lump sum or spread it out over eight years. If an issuer chooses to pay the liability over time, we typically add to debt the net present value (NPV) of the liability. To enhance consistency and comparability with other adjustments we make to debt, we typically use a discount rate of 7% when calculating the NPV. Measurement basis of long-term liabilities 3. In accordance with R&A;, we typically measure certain long-term liabilities that do not bear explicit interest payments by calculating the net present value of the liabilities using a discount rate. For instance, minimum noncancellable operating lease commitments are discounted at 7%. For other liabilities, such as bonds or loans that pay interest, the amortized cost basis of measurement captures the discounting impact of the debt principal. Adjustment to debt for shares other than common stock 4. In accordance with R&A;, we will not add to our adjusted debt measures classes of shares, regardless of their denomination, provided that those shares can never require any cash payments or cause any credit stress and that they comply with all of the following conditions: No stated coupon or yield; No maturity; No ability to redeem for cash (but could be converted into common stock); No covenants or events of default; No security or guarantees; and Subordination to all debt. 5. This provision would also apply if shares that comply with all of the above conditions include one or both of the following: A preference in liquidation to other common stock; and/or A preference in the distribution of dividends when dividends are declared, but no entitlement to dividends otherwise. This would be the case, for example, if when dividends are declared there is an agreement among shareholders about how those dividends are distributed. We would not include in this provision shares that carry a dividend that can be deferred, whether cumulative on non-cumulative. These instruments are typically covered by our hybrid criteria. 6. However, we will add to our adjusted debt measures: Shares that are subject to a put option or other economically similar mechanism (except if the put option can only be exercised upon an initial public offering). 7. Shares other than common stock provided by controlling shareholders should be analyzed under our non-common equity criteria. Adjustment to debt and EBITDA for master service agreements in the telecommunications sector 8. The International Accounting Standards Board's International Financial Reporting Standard 16 (IFRS 16) will become effective for companies reporting under IFRS in 2019. The new rule will treat telecom tower master service agreements as an expense. S&P; Global Ratings has decided to adjust for these contracts in the same way that we adjust for operating leases to enhance comparability between mobile network operators that: Own towers, Lease towers through a master lease agreement, or Have signed a service agreement. 9. In our view, the current differences between the three models are not material enough to require different analytical treatment. The towers serve a similar purpose for network operators in all three cases, and are crucial to ongoing operations. Given that mobile operators need to either own these assets or ensure they have long-term access to them, we see a service agreement as similar to an operating lease. 10. Expected impact. Adjusting the mobile operator's figures to account for its service agreement has two material implications: Higher

profitability because we exclude the fees paid to the tower company from operating expenses; as a result, EBITDA margins are higher. Higher adjusted debt amount because we are adding the liability to the balance sheet. The impact on a mobile operator's credit metrics will generally depend on the length of the contract and the magnitude of the operator's debt. 11. Table 1 shows an example of how we would adjust the figures for an operator that makes annual payments of €40 under a 15-year contract with a tower company. Capitalizing the annual payment not only raises EBITDA but also debt, because we value the future obligation at a 7% discount. The net effect in this example is a leverage increase of 0.66x. Table 1 Example Of Adjustments Made For A Master Service Agreement (€)

	REVENUES	EBITDA	MARGIN (%)	DEBT	DEBT/EBITDA (X)	IFRS 16 Reported Figures
1,200	360	30	900	2.50		
Lease adjustment to EBITDA	0	40	3	0	(0.25)	
Lease adjustment to debt	0	0	0	364	0.91	
S&P; Global Ratings adjusted figures	1,200	400	33	1,264	3.16	

12. The less indebted the company is, the higher the impact of a lease on its leverage ratio--the lease liability would be a larger component of total debt. However, there is little difference between a lease agreement and a service agreement in terms of cash flows and economic benefit to the mobile operator. We therefore aim to treat both contract types consistently when assessing the financial risk profile, which will maintain comparability between telecom companies' credit metrics. 13. Background. Mobile network operators rely upon networks of radio towers, which support their business by broadcasting signals to and receiving signals from the mobile devices of their customers. Traditionally, mobile operators have owned these assets. But over time, some operators have sold their towers to specialty infrastructure companies. They then rent space on the towers to place their antennas, which transmit and receive radio frequencies. This model typically employs a master lease agreement, whereby the mobile operator pays a fee in exchange for renting a specific space on the tower. The tower company also provides related maintenance. More recently, however, we've seen mobile operators sign long-term service agreements under which they have access to the full tower network but are not assigned specific spaces for their antennae. The tower company commits to manage deployment of the equipment to ensure an agreed level of service quality. 14. IFRS treatment. Under IFRS 16, leases will be recognized on-balance sheet and service contracts off-balance sheet. Whether a contract is defined as a lease largely depends on the right to control an identified asset. 15. In a lease agreement, the mobile operator controls specific spaces on towers, which are used for their active equipment. This will be considered a lease contract because the asset is identified (designated space on specific towers) and the mobile operator remains in control of the identified asset. On its balance sheet, the mobile operator will recognize a right-of-use asset and lease liability based on discounted payments required under the lease. The mobile operator will not recognize the rental payments as an operating expense; instead, the asset will depreciate and interest is recognized based on the outstanding lease liability. 16. However, in a service agreement, the tower operator controls the towers and can move the mobile operator's equipment to alternative towers if it chooses. Therefore the contract is to provide a service and does not contain a lease under IFRS 16. Contract fees will be treated as operating expenses and will remain off the balance sheet. 17. Analytical considerations. If we were to follow IFRS 16, adopting service accounting would immediately and materially strengthen a mobile operator's leverage ratios, compared with a leased-tower scenario. But we do not believe the mobile operator's credit risk would have fundamentally changed, and think the more favorable financial comparison proposed under the new accounting standard would distort comparison across companies. 18. In deciding whether to adjust for service agreements, we sought to understand how a service arrangement substantively changes the operations and risk managed by mobile operators and tower companies alike. We think lease agreements already contain a service element because the tower company provides maintenance services in addition to the space on the towers. Service agreements could introduce new and material value-added services, such as: Active management of the equipment on a tower company's network to meet key performance indicator service requirements; or Implementation of new communication coverage requirements or protocols, for example, deployment of small cell stations and fifth generation (5G) mobile networks. 19. However, we do not view this as a certainty and anticipate scenarios where a service agreement tower portfolio remains a relatively static, mature asset. As new technologies and coverage requirements emerge, mobile operators may choose to retain responsibility for active network management in order to differentiate themselves from peers and gain a competitive advantage. Therefore, although we see the

potential for additional services under a service agreement, we currently do not see the difference as material enough to warrant a different treatment compared with many of our telecom issuers that have lease agreements in place. We would need to see clear evidence of this in practice before treating tower service agreements differently from lease agreements. This would likely require measurable signs of active network monitoring and management, manifest in detailed real-time analysis and active physical evolution, resulting in a more dynamic, less static network over time. Our accounting adjustments seek to enhance comparability 20. To facilitate global comparisons and benchmarking, our rating analysis incorporates quantitative adjustments to the reported financial statements of companies. These adjustments align a company's reported figures more closely with our view of underlying economic conditions and the credit risk inherent in its transactions and arrangements. Although we may adjust certain figures reported under applicable accounting principles, this does not imply that we challenge the company's application of those principles, the adequacy of its audit or financial reporting process, or the appropriateness of the accounting judgements made to fairly depict the company's financial position and performance for other purposes. 21. Our adjusted debt principle underpins our approach and drives many of the analytical adjustments we make. It results from our view that certain implicit financing arrangements are similar to debt. Depicting these transactions as debt--often in contrast to how a company reports them--affects not only the quantification of debt, but also the measures of earnings and cash flows we use in our analysis. 22. In general, items that we add to reported debt include on- and off-balance-sheet commitments for the purchase or use of long-life assets (such as lease obligations) or businesses (such as deferred purchase consideration) where the benefits of ownership are accruing to the company. We typically view sale and leaseback transactions as a form of financing. If we can, we capitalize the entire sale amount to debt, even if the net present value of future lease payments is a lower figure. 23. Under IFRS, if a mobile operator sells its towers to a tower company and then enters into a service agreement with that company, it has not entered into a sale-and-leaseback transaction because the service agreement does not meet the definition of a lease under IFRS 16. IFRS considers that the tower operator controls the network because it has "substantive substitution rights" with regard to the asset. 24. By contrast, we do not consider that this feature alone is sufficient to completely override our view that the transaction has an implicit financing component. This sort of transaction changes the mobile operator's situation. Pre-transaction, it owned and used the network of radio towers to generate cash flows. Post-transaction, it still makes use of the network of radio towers to generate cash flows, but it receives cash upfront in exchange for regular, fixed, and noncancellable deferred payments (as is the case with a lease). In our view, the transaction does not clearly improve the fundamental financial risk profile, but the IFRS expense accounting treatment implies such an improvement by reducing its leverage. The same would be true if a mobile operator switched from a lease agreement to a service agreement or signed a service agreement with no prior access to the towers, in lieu of buying or leasing them. Applicability 25. This document provides guidance specific to the tower master service agreement contract and the telecom sector, based on their unique characteristics. There are instances of other transactions and arrangements that share some features of the tower master service agreement, but where we don't make a debt adjustment. For example, some utilities spun off their transmission networks and then entered into service contracts for the transportation/transmission of gas and electricity. However, these utilities do not pay the service providers under a bilateral contract in the same way that mobile operators pay tower companies. Instead, the utility bills its retail customers and allocates a portion of the revenues to distribution, transmission, and suppliers, on a regulated basis. 26. If disclosures in the financial statements lack sufficient detail, we may face practical challenges in adjusting the debt of mobile operators that use tower service agreements. However, this is a familiar issue. We frequently estimate our analytical adjustments based on additional information provided by issuers. For example, we seek information from issuers regarding the amount of cash and liquid investments that they cannot access at short notice to repay debt, and use this information to apply a haircut to our surplus cash figure. Could our view change? 27. We acknowledge that we have decided to adjust for tower service agreements based on the small sample size and short track record of such agreements to date. In time, if tower companies build a track record of active network management under these agreements, such that the service portion of the contract is demonstrably its overriding feature, we could change our view. This could lead

us to treat tower service agreements as a service and reflect them as an expense, either in whole or, if we have sufficient detail regarding the service portion of the contract, in part. Related Criteria Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013 Related Research U.S. Tax Reform: An Overall (But Uneven) Benefit For U.S. Corporate Credit Quality, Dec. 18, 2017 Criteria And Guidance: Understanding The Difference, Dec. 15, 2017 This article is a guidance document for Criteria (Guidance Document). Guidance Documents are not Criteria, as they do not establish a methodological framework for determining Credit Ratings. Guidance Documents provide guidance on various matters, including: articulating how we may apply specific aspects of Criteria; describing variables or considerations related to Criteria that may change over time; providing additional information on non-fundamental factors that our analysts may consider in the application of Criteria; and/or providing additional guidance on the exercise of analytical judgment under our Criteria. Our analysts consider Guidance Documents as they apply Criteria and exercise analytical judgment in the analysis and determination of Credit Ratings. However, in applying Criteria and the exercise of analytic judgment to a specific issuer or issue, analysts may determine that it is suitable to follow an approach that differs from one described in the Guidance Document. Where appropriate, the rating rationale will highlight that a different approach was taken. Only a rating committee may determine a rating action and this report does not constitute a rating action.