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Key Credit Factors For The Telecommunications And Cable Industry

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RELATED CRITERIA AND RESEARCH

Key Credit Factors For The Telecommunications And Cable Industry

1. Standard & Poor's is refining and adapting its methodology and assumptions for telecommunications and cable companies. We are publishing this article to help market participants better understand the key credit factors in this industry. This article is related to our global corporate criteria (see Corporate Methodology, published Nov. 19, 2013, on RatingsDirect) and our criteria article Principles Of Credit Ratings, published Feb. 16, 2011.
2. The criteria update and supersede Key Credit Factors For The Telecommunications And Cable Industry, published Dec. 12, 2013, to include information on Standard & Poor's treatment of subscriber acquisition costs for wireless telecommunications companies, found under the Accounting And Analytical Adjustments section. Apart from the additional information on subscriber acquisition costs in the criteria, the rest of the criteria remain the same as the version published on Dec. 12, 2013.

SCOPE OF THE CRITERIA

3. Standard & Poor's Ratings Services is refining its criteria for the global telecommunications and cable industry.
4. By telecommunications (telecom) companies, we mean issuers that originate, transport, and terminate voice and data on owned and/or leased terrestrial networks, wireless networks or via satellite, or a combination of these modalities. This includes wireline (sometimes called "landline") operators that primarily utilize terrestrial networks, and wireless providers that use licensed spectrum to connect wireless devices to other wireless devices and to wireline networks.
5. By cable companies, we mean issuers that provide television and generally provide voice and data services as well. This Key Credit Factors also applies to the following segments: Direct-to-home (DTH) providers of video that utilize geosynchronous satellites; tower companies that lease tower space to wireless service providers and to TV and radio broadcasters; fixed service satellite (FSS) companies that use geostationary satellites to transmit and distribute voice, data, and video to mostly commercial customers; data center operators that provide fitted space and connectivity to telecommunications carriers and to enterprises; and mobile satellite services (MSS) operators that provide voice services where terrestrial service is not available, including to remote regions, ships, and aircraft.

SUMMARY OF CRITERIA UPDATE

6. Standard & Poor's is updating its global criteria for telecommunications and cable companies, applying Standard & Poor's global corporate criteria.
7. We view telecom and cable as an "intermediate risk" industry under our criteria, given its "low" cyclicality risk and "intermediate" degree of competitive risk and growth environment. In assessing the competitive position of a telecom and cable issuer, we put particular emphasis on: competitive environment, market share, regulation, technology, and

operating efficiency. In our assessment of the financial risk profile, we consider company-specific capital expenditures necessary to remain technologically competitive or to expand the service footprint and those expenditures' effect on cash flow coverage ratios.

IMPACT ON OUTSTANDING RATINGS

8. We do not expect these criteria, in and of themselves, to result in any rating changes. See the global corporate criteria for the impact on ratings for this industry.

EFFECTIVE DATE AND TRANSITION

9. These criteria are effective immediately on the date of publication.

METHODOLOGY

Part I: Business Risk Analysis

A. Industry Risk

10. Within the framework of Standard & Poor's global corporate criteria for assessing industry risk, we view telecom and cable as an "intermediate risk" industry. Our industry risk assessment for telecom and cable is derived from our view of the segment's low (2) cyclicalities and our assessment that the industry warrants an intermediate (3) competitive risk and growth assessment.
11. The key drivers of the low cyclicalities in the telecom and cable industry reflect that many telecom and cable services demonstrate significant, utility-like demand characteristics. As a result, telecommunications and cable companies have historically not been materially negatively affected by weak macroeconomic conditions. In the consumer segment, telecommunications, and to a lesser extent, television services are near necessities in developed markets. Cyclicalities are limited in the commercial segment, since telecommunications are a vital and integral part of most businesses and core to the increasing number of Internet-based businesses. Demand from enterprise customers can be affected by corporate spending trends and by the unemployment rate. This does not generally affect ongoing revenues, although it can cause a deferral of longer term projects by customers including: installation of telecommunications systems; leasing of satellite capacity; and provisioning of data center space.
12. Price competition is overall moderate for telecom and cable but with significant variations across segments. Segments characterized by limited value-added products and services, along with a lack of customer contracts, have the most intense price competition and most cyclicalities. Price competition generally is not a factor for postpaid wireless customers during the term of their contracts. However, price competition for the wireless segment, on an overall basis, is significant as postpaid customers can readily switch carriers and keep their wireless phone numbers at the end of the

contract period. Wholesale services, including long haul transport and voice, are often purchased on a spot market basis where customers are seeking least-cost routing and are relatively indifferent to the particular supplier. As a result, these services are subject to considerable pricing pressure. Conversely, services characterized by a significant portion of customer customization, multi-year customer contracts, and material customer switching costs are subject to less price competition and cyclicity. These services include customized enterprise telecommunication networks, wireless tower leasing, and managed data center services. Historical data are limited for wireless services as the segment, now the telephone industry's largest, has only been a meaningful contributor to telecom carrier revenues since the early 1990s.

1. Cyclicity

13. We assess cyclicity for the telecom and cable industry as "low risk" (2). The industry has demonstrated only modest cyclicity relative to other industries, in both revenue and profitability, which are the two key measures used to derive an industry's cyclicity assessment (see Methodology: Industry Risk, Nov. 19, 2013). Based on our analysis of global Compustat data, telecom and cable companies experienced an average peak-to-trough (PTT) decline in revenues of only around 3% during recessionary periods since 1979. The steepest revenue declines were 5.6% and 5% during two economic downturns within the data period. The average PTT decline in EBITDA margin was 3.3% during recessionary periods since 1979. The steepest declines were 5.3% and 5.1% during two economic downturns since 1979.
14. The average PTT decline in revenue and profitability calibrates to a cyclicity assessment of "low" risk. We believe somewhat higher revenue and profitability cyclicity is likely in the future due to greater exposure to consumer discretionary spending and changing consumer preferences for telecom and pay TV, but we expect that modestly higher cyclicity will still remain consistent with our view of low cyclicity for telecom and cable.

2. Competitive risk and growth

15. We view telecom and cable as warranting an intermediate (3) competitive risk and growth assessment. To assess competitive risk and growth, we assess four sub-factors as low, medium, or high risk. These sub-factors are:
 - Effectiveness of industry barriers to entry;
 - Level and trend of industry profit margins;
 - Risk of secular change and substitution by products; services, and technologies; and
 - Risk in growth trends.
- a) Effectiveness of the telecom and cable industry's barriers to entry--low risk**
16. Barriers to entry in the telecom and cable industry can provide substantial protection to the incumbent operator and these barriers are generally segment-specific. The principal barriers to entry fall into four categories: 1) licensure or regulatory approval, 2) resource limitations, 3) contractual relationships, and 4) financial factors.
 17. Wireline providers require government concessions that are generally granted to only a limited number of companies, sometimes only one or two per market. Wireless carriers require licensed spectrum, a limited resource that may be expensive or unavailable. Physical barriers to entry include the rights-of-way and/or utility pole attachment rights needed by terrestrial telephone and cable companies to construct their plants. These rights may not be available due to regulation or to physical limitations on how many carriers can attach to utility poles or be accommodated in an

underground conduit. Additionally, the ability for new wireless carrier entrants to construct towers may be difficult, especially in urban areas, due to a lack of suitable sites and to restrictive zoning laws, factors that combine to protect the incumbent carrier from potential competition. For satellite operators, including DTH and FSS, the more desirable geostationary satellite orbital slots are quite limited in number and are assigned under international agreements and present a significant entry barrier to potential competitors. The prime locations for data center providers are near target customers and interconnection points with telecom carriers and are limited in urban environments, providing well-located incumbent data center companies some protection from new entrants.

18. Multiyear customer contracts create effective barriers to entry, even for commodity-like products and services. Wireless services ultimately have little product differentiation and, in most jurisdictions, customers can readily switch their telephone number to another carrier. Therefore a wireless carrier with a predominantly post-paid (contracted) subscriber base will invite less competition. Similarly, in the enterprise segment, providers of undifferentiated wholesale services and transport services to business customers benefit if their customers are under multiyear contracts. Since the build-out of terrestrial networks is capital intensive, access to capital is a barrier to entry, particularly during difficult market conditions, favoring larger and more mature companies.

b) Level and trend of telecom and cable industry profit margins--low risk

19. Telecom and cable profit margins are generally high relative to other industries. Profit margins are supported by providers' ability to leverage the rapid pace of developments in technology that have increased the performance and capacity of existing copper and fiber optic networks. Improved data compression algorithms and dense wave division multiplexing (DWDM) (which enables the use of multiple light wavelengths on a single optical fiber), respectively, have effectively multiplied the capacity of wireless and wireline networks contributing to profit margin stability during the economic cycle. The margin impact of the lower pricing per unit of transmitted data has been more than offset, to date, by increased demand for bandwidth to accommodate exponential growth in global Internet traffic as well as for wireless voice and data services.
20. We believe the downside risk to global profit trends is limited on an overall basis but we do expect variability in profit trends, largely related to market maturity. Factors that support favorable profit trends include our expectation for increasing demand for wireline and wireless bandwidth to support high speed, data-intensive application, and rising Internet traffic. Favorable profit margin trends are also supported by operating efficiencies from network sharing agreements among wireless operators, network modernization and optimization that reduce operating costs, distribution efficiencies through online platforms, and outsourcing for lower labor costs. Companies with subscription-based residential business models or with long-term contractual commercial engagements have enhanced profit margin potential.
21. Conversely, we anticipate profit compression in mature, competitive markets and especially in residential wireline. Profit levels will be pressured in mature wireless markets where we anticipate that growth in data usage will not fully offset a lack of customer growth and increasing competition for market share. Wireless pricing competition often manifests in handset subsidies that dampen margin potential for wireless providers, in particular, for wireless providers that have a material portion of customers that are not under contract.
22. Profit trends are generally unfavorable for residential wireline voice telephone providers; in mature markets, wireline

voice customers will continue to be lost to wireless substitution, and in underserved developing markets, wireless is widely viewed as superior to wireline as the better technology to meet public policy goals to quickly deploy telephone service to underserved areas at the lowest cost.

c) Risk of secular change and substitution by products, services, and technologies--medium risk

23. Telecom and cable companies are subject to technological displacement and substitution, but the risk varies by sector, in our view. Traditional fixed-line voice providers are the most vulnerable industry participants and continue to face customer erosion and pricing pressure from "wireless substitution" as residential consumers increasingly opt for no landline telephone, a trend we expect to continue. Landline voice is also vulnerable to alternative technologies, especially voice over Internet protocol (VoIP) technologies that enable calls to be carried wholly, or in large part, over the Internet at markedly lower cost compared to the incumbent telephone company. IP-based messaging applications and changing customer behaviors weigh on demand and prices for traditional mobile voice and text messages.
24. Cable operators face continued substitution risk as video customers are lost to DTH satellite providers and to rival, incumbent telephone company video services. Cable and DTH's medium- to longer-term substitution threat is over-the-top (OTT) video where customers obtain video from both free and paid Internet-based sources. The increasing availability of the broadband connections needed to enable OTT along with the increasing quantity, quality (including original programming), and variety of Internet-based content, increase the prospects of DTH and cable video customer losses to OTT. OTT is a much more significant risk for DTH companies that sell essentially only video. Most cable companies, in contrast, have expanded their product set and become less reliant on vulnerable retail video revenues than DTH providers; further, cable operators are usually well-positioned to supply the high speed connections needed for OTT.

d) Risk in telecom and cable industry growth trends--medium risk

25. The overall medium risk for growth trends for telecom and cable reflects a combination of only modest growth potential and the sector's limited cyclicity. Growth trends in telecom and cable are generally not strongly tied to prevailing economic conditions due to the utility-like nature of many telecom and cable services; instead, these growth trends, in our opinion, are more closely linked to market and product maturity. Risk to growth for telecom and cable, in general, is tempered by favorable demand prospects for bandwidth driven by continued exponential increases in global Internet usage including the shift toward data-centric smart wireless devices. However, risk-to-growth trends do vary by country and market maturity. Market maturity poses the greatest risk when the rated company does not have another product waiting in the wings to sustain growth. Wireline telephone operators in mature markets and with little other product diversity are subject to the highest risk in growth trends as we expect residential wireline voice customers to continue to be lost to wireless substitution and to lower-cost, alternative VoIP technologies. Conversely, while new voice customer growth for wireless operators in mature markets is plateauing, we still expect some growth in wireless revenue to be generated by increased data usage supported by the increasing number of smart phones and other connected devices including tablets.
26. Demand for new wireless towers in mature markets is tapering off since the great majority of economically serviceable wireless areas have been built out. However, growth trends for tower companies are favorable and supported by the automatic lease escalators in their typical long-term contracts. Tower companies with a significant portion of their portfolio in developing wireless markets have the highest growth potential, resulting from demand for the new towers

needed to expand service footprints and accommodate greater network usage. We expect favorable profit trends for data center companies, driven by demand for additional square footage to support increased Internet usage and the growing number of Internet-based businesses along with the trend for businesses to outsource housing and powering of critical computer network components.

B. Country Risk

27. Country risk plays a critical role in determining all ratings on companies in a given country. Country-related risk factors can have a substantial effect on company creditworthiness, both directly and indirectly. In assessing country risk for a telecom and cable company, our analysis uses the same methodology as with other corporate issuers (see Corporate Methodology). A key factor in our business risk analysis for corporate issuers is the country risk assessment, which includes the broad range of economic, institutional, financial market, and legal risks that arise from doing business in a specific country.
28. We prefer to determine exposure to country risk using EBITDA since it is consistent with other aspects of our analysis for the telecom and cable industry including the use of EBITDA in our primary operating efficiency metric. We use revenue to determine exposure to country risk when EBITDA information is unavailable.

C. Competitive Position (Including Profitability)

29. Under our general corporate criteria, a company's competitive position is assessed as (1) excellent, (2) strong, (3) satisfactory, (4) fair, (5) weak, or (6) vulnerable. In assessing the competitive position for telecom and cable issuers we review an individual company's:
 - Competitive advantage;
 - Scale, scope, and diversity;
 - Operating efficiency; and
 - Profitability.
30. The first three components are independently assessed as either: 1) strong, 2) strong/adequate, 3) adequate, 4) adequate/weak, or 5) weak. Profitability is assessed through the combination of two subcomponents, the level of profitability, and the volatility of profitability.
31. After separately evaluating competitive advantage; scale, scope, and diversity; and operating efficiency, we determine the preliminary competitive position assessment by ascribing a specific weight to each component. The applicable weightings will depend on the company's competitive position group profile (CPGP). The CPGP assigned to most telecom and cable issuers that we rate is "service and product focus," whereby we weight the components of competitive position as follows: competitive advantage (45%); scale, scope, and diversity (30%); and operating efficiency (25%). We may assign the "capital or asset focus" CPGP to telecom and cable companies that exhibit significant upfront capital expenditures and deliver commodity-type services. These include long-haul data transporters, tower lessors, FSS, and data center operators. The components for companies assigned the "capital or asset focus" CPGP are weighted as follows: competitive advantage (30%); scale, scope, and diversity (30%); and

operating efficiency (40%).

1. Competitive advantage

32. In assessing the competitive advantage of a telecom and cable company, we consider its:
- Market position and the competitive environment;
 - Applicable regulation;
 - Level of installed technology; and
 - Customer quality.
33. We review market position and competitive environment taking into consideration a company's relative success in establishing a solid market share along with its quality and brand reputation. Market share is evaluated relative to the sector taking into consideration the number of competitors and the level of barriers to entry. For example, we would expect a successful incumbent wireline telephone company to have the dominant share of voice traffic in its market. In contrast, a successful wireless carrier competing against several other carriers would have more than its proportionate market share.
34. We evaluate regulation to the extent that it provides a material competitive advantage or disadvantage. In a pro-competition regulatory environment, the incumbent is often required to lease its network to other operators at below-cost prices, in essence, subsidizing its competition. Conversely, regulation can also be protective of the incumbent by erecting substantial barriers that effectively prevent, or at least discourage, new competition.
35. We review the state of a telecom and cable issuer's installed technology with the understanding that rapid technological improvements have enabled industry providers to deliver more and higher-speed services at a declining cost and that the pace of technology improvement will continue. We consider the state of the issuer's technology relative to its industry segment as well as to its market-specific competitors. For a wireless provider, we would assess availability of third and fourth generation (3G and 4G) technology. For a cable company, we consider channel capacity, deployed digital technology, and high-speed connectivity offering. A telecom and cable company with superior technology that supports a wider suite of services and with higher quality levels can extract premium pricing and reduce customer churn. A company with a high level of installed technology can invest in expansion and marketing initiatives that will increase revenues. In contrast, a company with lagging technology cannot offer a full array of market-competitive services, which is a clear competitive disadvantage. Further, such a company will need to divert cash to basic network upgrades, instead of investing in cutting edge technology, to remain a viable competitor.
36. We review the impact of customer quality on competitive advantage by looking at the contractual relationship with the customer and, for companies that primarily serve commercial customers, customer creditworthiness. For providers of services with limited differentiation and low switching costs, including wireless service, and wholesale voice and transport, an enforceable customer contract bolsters revenue stability and reduces marketing costs; further, the enhanced revenue visibility improves a company's strategic planning process. In contrast, a competitive disadvantage would arise for a provider of such services that either had a significant portion of revenues not under contract or whose average remaining contract length was shorter than its peers'.
37. A telecom and cable company with a "strong" or a "strong/adequate" competitive advantage assessment typically is

characterized by a combination of:

- Successful market position, demonstrated by a leading or substantial (more than one-third) market share;
- Favorable brand recognition and reputation, factors that support premium pricing, superior customer retention, and lower marketing costs;
- Participation in industry segments with favorable longer-term growth prospects delivering services with some utility-like demand characteristics;
- Limited competition within a supportive, predictable regulatory framework that provides meaningful barriers to entry;
- Government policies that stimulate demand such as durable subsidies for certain residential telecommunication services;
- State of the art technology and (for wireless carriers) adequate spectrum for foreseeable demand;
- Locations near enterprise customers and carrier interconnection points for data center providers; and
- Enhanced revenue visibility and some degree of leverage with customers through contractual relationships and/or material switching costs on the part of customers.

38. A telecom and cable company with a "weak" or "adequate/weak" competitive advantage assessment typically is characterized by a combination of:

- Lagging market penetration;
- Unfavorable reputation that results in below-market pricing and inferior customer retention, leading to elevated marketing costs;
- High level of competition within a regulatory regime that lacks stability and establishes few barriers to entry;
- Far larger and better-capitalized competitors including global companies;
- 10% or more of revenues derived from implicit or explicit government or regulatory subsidies that are vulnerable to changes in regulatory and governmental policies;
- Lagging technology or lack of operational resources (such as wireless spectrum or satellite orbital slots) that weaken the ability to maintain adequate customer service levels and meet future customer demand, resulting in a competitive disadvantage;
- Mandatory inclusion of influential domestic investors that impairs operational flexibility and efficiency; and
- Lack of customer contracts in sectors where there are otherwise few barriers to entry.

2. Scale, scope, and diversity

39. In assessing scale, scope, and diversity of a telecom and cable company, we consider the factors that influence business stability and enable realization of scale economies, including:

- Size of the operator's footprint, network, or other segment-relevant measures;
- Geographic diversity; and
- Product diversity including the ability to offer a competitive suite of services.

40. In reviewing size, we consider the impact that an operator's customer base and network assets have on the ability to realize economies of scale. A larger footprint or service area enables wireless and wireline service providers to carry a greater portion of traffic "on-network," reducing the need to pay for third-party carriage. The largest cable and DTH companies negotiate the lowest programming costs. Large telecom and cable operators generally pay less for network and consumer premise equipment (CPE). The largest wireless operators may have superior access to the popular consumer devices.

41. In reviewing geographic diversity, we generally assume that participation in a variety of attractive and geographically diverse markets will improve the stability of financial performance in the event of a regional market downturn. A variety of markets also lessens the exposure of a telecom and cable company to a particularly aggressive competitor and to a local or regional regulator.
42. In reviewing product diversity, we consider a telecom and cable company's ability to offer a competitive suite of services since an array of attractive bundled package offerings will increase revenue per customer and improve customer retention. Product diversity reduces exposure to the substitution of, or reduced customer demand for, a single key product or service.
43. A telecom and cable company that warrants a "strong" or "strong/adequate" assessment of scale, scope, and diversity typically is characterized by a combination of:
 - Scale sufficient to optimize operating leverage given the significant fixed-cost component of network-intensive segments including wireless and wireline, cable, long-haul transport, towers, and satellite-based services;
 - A service area footprint sufficiently large to enable most traffic (terrestrial or wireless) to be originated, transported, and terminated on-network with minimal need to pay for third-party carriage;
 - Sufficient size to enable timely access to the most popular wireless devices. Manufacturers may ship their latest product to the largest wireless carriers first and may even grant a period of product exclusivity to a single wireless operator that can introduce their product to its large customer base;
 - A large customer base that enables cable and DTH operators the power to bargain for favorable programming costs. This is especially significant for operators in the U.S., where programming inflation is a major concern, but not as important in Europe where operators generally deliver less premium content;
 - Operations in several attractive geographically and economically diverse markets; and
 - Diversification across wireline and wireless broadband product lines, which enables telecommunications providers to offer the attractive, integrated service bundles that improve customer satisfaction and retention and minimize the risk of product substitution. For example, recent years' loss of residential wireline voice customers to wireless substitution has mostly affected pure wireline telephone companies, while integrated telecom companies have mitigated the impact of wireless substitution from growth in their other segments including wireless, enterprise, and data centers.
44. A telecom and cable company that warrants a "weak" or "adequate/weak" assessment of scale, scope, and diversity typically is characterized by a combination of:
 - A small customer base over which to spread fixed costs;
 - Limited service area or network coverage that requires a telecom provider to pay third parties to originate, transport, and terminate a material portion of traffic. Regional wireless providers in particular, in order to offer requisite nationwide services plans, pay substantial amounts to other wireless providers to service customers that roam off the regional carrier's limited network footprint;
 - A small video customer base that results in higher programming costs for cable and DTH companies;
 - A small wireless customer base that may impede timely access to the most in-demand wireless devices and result in a temporary but material competitive disadvantage;
 - Customer concentration (two or more customers that each account for at least 10% of a company's consolidated revenues) constitutes a weakness. Customer concentration can be a material weakness, in particular, for satellite operators and certain telecom services companies with reliance on a single major customer or lessee. Significant reliance on less-than-creditworthy customers for a significant portion of revenues weakens our diversity assessment;

- Operations concentrated in a jurisdiction where regulation and public policy is unstable; and
- Little product diversification that overly exposes the company to the impact of changes in customer preference for its limited product line. Further, the inability to offer a service package that bundles and integrates wireline and wireless services increases the likelihood of customer churn, especially in certain commercial markets.

3. Operating efficiency

45. In assessing operating efficiency of a telecom and cable company, we consider factors that ultimately influence its EBITDA margin, including:
- Revenue per customer or asset unit;
 - Capacity utilization measures;
 - Customer service and quality metrics; and
 - Cost management practices.
46. EBITDA margin is the key metric used in our assessment of operating efficiency for a telecom and cable company. We consider an issuer's industry segment and the nature and maturity of its markets in considering EBITDA margin. For example, a 60% EBITDA margin may be viewed as consistent with average operating efficiency for a wireless tower operator whereas a 35% EBITDA margin for a wireless services provider could be consistent with our view of "strong" operating efficiency. Regarding market maturity, startups have depressed EBITDA margins due to initial marketing costs/customer subsidies along with fewer customers over which to spread fixed costs. Conversely, mature markets have little absolute EBITDA growth potential but an EBITDA margin that is likely at its peak due to lower per unit expenses, including marketing, related to the larger installed base.
47. We also consider asset utilization in assessing operating efficiency. We evaluate capital expenditures as a percentage of revenue in general. We also use the segment-specific measurements outlined in paragraphs 49 and 50, below.
48. In considering customer service and quality metrics we consider the company's performance with respect to customer churn and customer satisfaction metrics. Those metrics include customer call wait times, percentage of problems resolved on the first customer call and, for wireless operators, network quality measures.
49. A telecom and cable company that warrants a "strong" or "strong/adequate" assessment of operating efficiency is characterized by a combination of:
- High revenue per customer or asset unit, as more fully described below, that results in an EBITDA margin consistently better than those of peers that have a similar sales mix;
 - For wireless and cable providers, high average revenue per user (ARPU) along with low subscriber acquisition costs (SAC) from superior marketing performance;
 - For wireless operators, large service areas that can carry most traffic on-network and minimize payments to other carriers for off-network customer roaming;
 - For FSS, a high percentage of satellite transponder utilization capacity;
 - For wireless and broadcast tower operators, above average number of tenants/customers per tower and high lease renewal rates;
 - For data center operators, above-average percentage utilization of total space or total power output, above-average yield per square foot, and a high lease renewal rate;
 - Capital spending as a percentage of revenues that is lower than that of peers (that have similar sales mix and market maturity) along with return on capital that is higher than peers'.

- Superior customer satisfaction metrics that result in low customer churn; and
- Proactive management efforts to anticipate and mitigate declining business segments via expansion into higher potential growth areas. For residential wireline voice providers, this includes a track record of reducing operating expenses to reflect weak secular trends.

50. A telecom and cable company that warrants a "weak" or "adequate/weak" assessment of operating efficiency is characterized by a combination of:

- Low per unit revenue that results in an EBITDA margin that is consistently lower than that of peers that have a similar sales mix;
- For wireless and cable providers, low ARPU along with high SAC reflecting subpar marketing/operational performance, resulting in inferior customer satisfaction and elevated churn;
- For regional wireless operators, significant payments to other carriers to provide service when its customers roam off its limited footprint;
- For FSS, a low percentage of transponder utilization;
- For data center operators, low utilization of total space/power output that depresses yield per square foot along with shorter than average lease term and subpar lease renewal rate;
- For wireless tower companies, lower than average tenancy that weakens margin, and this risk is magnified for towers that are built on spec;
- Capital spending as a percentage of revenue that is higher than peers' along with a low return on capital;
- High customer churn that increases marketing costs; and
- Failure of management to anticipate and effectively mitigate the impact of declining business segments by expanding into higher potential growth areas and, for residential wireline voice providers, to proactively lower operating costs.

4. Profitability

51. The profitability assessment can confirm or modify the preliminary competitive position assessment. The profitability assessment consists of two components: 1) the level of profitability; and 2) the volatility of profitability. The two components are combined into the final profitability assessment using a matrix (see Corporate Methodology, Nov. 19, 2013).

a) Level of profitability

52. The level of profitability is determined on a three-point scale: "above average" (1); "average" (2); and "below average" (3).
53. We use EBITDA margin as the primary indicator of a telecom and cable company's level of profitability, based on thresholds identified in table 1 below. We use return on capital (ROC) as a supplementary indicator to refine our assessment when the EBITDA margin is close to the threshold for "below average" or "above average" (see ROC thresholds in Table 2). For instance, if a company's EBITDA margin is at the high end of the defined range for "average" but its return on capital is comfortably in the "above average" range, we may assess its level of profitability as "above average". In accordance with the global corporate criteria, for this assessment we typically determine the five-years average EBITDA margin and ROC using the last two years of historical data and three years of forecast: We may put more emphasis on forecast years if we do not deem historical data representative, or to take into account deteriorating or improving profiles where prospective ratios meaningfully differ from average ratios.

Table 1**Cable And Telecom Companies' Profitability Levels (% EBITDA Margin)**

	Below Average	Average	Above Average
Telecommunications	< 25%	25 to 40%	> 40%
Cable	< 30%	30 to 40%	> 40%
DTH	< 20%	20 to 30%	> 30%
Towers/FSS/MSS	< 45%	45 to 60%	> 60%
Data centers	< 35%	35 to 50%	> 50%

Table 2**Cable And Telecom Companies' Return On Capital Thresholds (%)**

Below Average	Average	Above Average
< 8%	8 to 12%	> 12%

54. We use different EBITDA margin thresholds to differentiate between telecom and cable companies with primary business in one of five general categories: 1) telecommunications; 2) cable; 2) DTH; 3) towers, FSS, and MSS; and 5) data centers. The highest EBITDA margin thresholds are for the towers, FSS, and MSS and data center segments. Both of these segments are characterized by substantial upfront capital investment and low operating costs as well as very high EBITDA margins on incremental revenues. Thus, the high EBITDA threshold used to assess profitability as "above average" would apply to companies that have been most successful in exploiting the low incremental operating expense characteristic of their respective segment by attracting high revenue per unit. The revenue measurement unit varies by segment: For tower leasing, it is generally the number of tenants per tower; for FSS and MSS, the number of, and revenue per, customer; and for data centers, the percentage of square footage that is leased.
55. The EBITDA margins for the three other telecom and cable segments--telecommunications, cable, and DTH--are within a limited range with no more than a 15% span between "below average" and "above average" profitability. The three profitability thresholds for DTH are lower than for cable, which largely reflects the reliance of DTH on essentially only pay television, in contrast to cable operators, which also market telephone and high-speed data service. Both cable-delivered telephone and high-speed data services have very high incremental EBITDA margins because they use the existing cable network and have small associated operating costs.

b) Volatility of profitability

56. The volatility of profitability is determined on a six-point scale, from: "1" (least volatile) to "6" (most volatile).
57. We use EBITDA margin to determine the standard error of regression (SER) for telecom, cable, DTH, wireless towers, FSS, MSS, and data centers when there is sufficient historical data to ensure meaningful results. In accordance with the global corporate criteria, we may--subject to certain conditions being met--adjust the SER assessment by up to two categories worse (more volatile) or better (less volatile). If we do not have sufficient historical information to determine the SER, we follow the global corporate criteria guidelines to determine the volatility of profitability assessment.

Part II: Financial Risk Analysis

D. Accounting And Analytical Adjustments

58. In assessing the accounting characteristics of telecom and cable companies, the analysis generally uses the same methodology as with other corporate issuers (see Corporate Methodology, Nov. 19, 2013). Our analysis of a company's financial statements begins with a review of the accounting to determine whether the statements accurately measure a company's performance and position relative to its peers and the larger universe of corporate entities. To allow for globally consistent and comparable financial analyses, our rating analysis may include quantitative adjustments to a company's reported results. These adjustments also enable better alignment of a company's reported figures with our view of underlying economic conditions. Moreover, they allow a more accurate portrayal of a company's ongoing business. Adjustments that pertain broadly to all corporate sectors, including these sectors, are discussed in Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013. An analytical adjustment that is unique to this sector is discussed below.

1. Subscriber acquisition costs

a) Reporting considerations

59. Wireless telecom companies incur various costs to acquire new customers or subscribers, such as sales commissions and subsidies for wireless handsets. These costs are known as subscriber acquisition costs (SAC; also known as customer acquisition costs).
60. U.S. Generally Accepted Accounting Principles (GAAP) require all SAC to be expensed as incurred. However, International Financial Reporting Standards (IFRS) allow companies to capitalize SAC and amortize the amount over the average historical customer relationship period, subject to certain conditions being met. These conditions include having the right to receive future revenues associated with these costs. Accordingly, while most wireless telecom companies expense SAC, others capitalize these costs, which make comparison of their reported financial performance difficult.
61. We believe capitalizing, rather than expensing SAC, can have a meaningful impact on a company's financial statements and credit metrics. To enhance the comparability of wireless telecom companies' financial performance, we adjust reported financial statements when a company capitalizes SAC and the relevant information is disclosed and the amounts are material. The adjustment aims to treat the capitalized SAC as if they had been expensed in the period incurred.
62. The adjustment reduces EBITDA, FFO, cash flow from operations (CFO), and capital expenditure by the amount of SAC capitalized during the year. Similarly, we will reduce the depreciation and amortization (D&A) expense related to SAC amortization. In the absence of sufficient disclosures, we would reduce the D&A by the amount capitalized, so that the EBIT measures are not unduly suppressed.
63. We do not carry through the adjustment to the cumulative asset (and equity) accounts, given the complexity of making such adjustments and the fact that these balance-sheet items are secondary in our cash flow leverage analysis.

b) Standard & Poor's adjustment procedures for subscriber acquisition costs

64. The data requirements for the SAC adjustment include:

- Amount of SAC incurred and capitalized during the period; and
- Amortization amount for SAC costs during the period.

65. The calculations are done in the following manner:

- EBITDA, FFO, CFO, and capital expenditure: Subtract the amount of capitalized SAC;
- EBIT: Subtract (or add) the difference between the amount of SAC capitalized and the SAC amortization during the period; and
- D&A: Subtract the amount of SAC amortized during the period.

2. Cash flow/leverage analysis

66. In assessing the cash flow adequacy of a telecom and cable issuer, our analysis uses the same methodology as with other corporate issuers (see Corporate Methodology). Cash flow/leverage is assessed on a six-point scale--ranging from "minimal" (1) to "highly leveraged" (6)--by aggregating the assessments of a range of credit ratios, predominantly cash-flow based, which complement each other by focusing attention on the different levels of a company's cash flows in relation to its obligations.

3. Core ratios

67. For each company, we calculate in accordance with Standard & Poor's Ratios and Adjustment criteria two core debt payback ratios: FFO to debt and debt to EBITDA.

4. Supplemental ratios

68. In addition to our analysis of a company's core ratios, we also consider supplemental ratios in order to develop a fuller understanding of a company's credit risk profile and refine our cash flow analysis in accordance with Standard & Poor's Ratios and Adjustment criteria. Free operating cash flow (FOCF) to debt, the primary supplemental ratio that we use, recognizes the capital intensity of most telecom and cable companies. We also use discretionary cash flow (DCF) to debt as a supplemental ratio for issuers with high dividend payouts.

Part III: Rating Modifiers

E. Diversification/Portfolio Effect

69. Few issuers have material lines of business outside telecom and cable and related services. In assessing the diversification/portfolio effect on a telecom and cable company, our analysis uses the same methodology as with other corporate issuers (see Corporate Methodology), i.e., reserving potential diversification benefit to companies whose portfolios span different industries as defined by our industry classification.

F. Capital Structure

70. In assessing a telecom and cable company's capital structure, our analysis uses the same general methodology as with other corporate issuers (see Corporate Methodology).

G. Liquidity

71. In assessing the liquidity of a telecom and cable company, our analysis uses the same general methodology as with other corporate issuers (see Corporate Methodology).

H. Financial Policy

72. In assessing financial policy on a telecom and cable company, our analysis uses the same methodology as with other corporate issuers (see Corporate Methodology).

I. Management And Governance

73. In assessing management and governance on a telecom and cable company, our analysis uses the same methodology as with other corporate issuers (see Corporate Methodology).

J. Comparable Ratings Analysis

74. In assessing the comparable ratings analysis on a telecom cable company, our analysis uses the same methodology as with other corporate issuers (see Corporate Methodology).

RELATED CRITERIA AND RESEARCH

- Principles of Credit Ratings, Feb. 16, 2011
- Corporate Methodology, Nov. 19, 2013
- Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Methodology: Industry Risk, Nov. 19, 2013
- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Jan. 2, 2014
- Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012

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