

FOCUS

Investment Banking

Telecom Technology and Services Group

U.S. Communications Service Provider Quarterly



Investment Banking and Advisory Services

FOCUS Investment Banking LLC is a leading investment bank with specialized telecom technology and services expertise, concentrating on providing highly tailored services to emerging middle market and larger organizations in this sector:

- Mergers & Acquisition Advisory
- Corporate Development Consulting
- Strategic Partnering & Alliances
- Capital Financing, Debt & Equity
- Corporate Valuations

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U.S. Communications Service Provider Quarterly

By Richard Pierce, FOCUS Managing Director and Telecom Technology and Services Team Leader

FOCUS believes that the need for communications services has never been greater. Large enterprises, small and medium sized businesses and individuals have all come to rely upon ubiquitous access to voice, video and data services to run their day-to-day activities. Furthermore, the importance of Communications Service Providers (CSPs) appears poised to increase further as they begin to enable a variety of new services ranging from hosted PBX and videoconferencing platforms to in-home security and energy management solutions. Access to capital and the benefits of scale will mean that a small number of large companies will continue to dominate certain areas such as mobile wireless and video. However, FOCUS continues to see opportunities for middle market CSPs. While not as large as the industry giants, they continue to thrive by developing innovative business models that share one or more characteristics such as capital efficiency, customer responsiveness, an advanced technology platform and a focus on an underserved industry vertical or geography. Furthermore, it is often the middle market CSPs that point the direction for the future of the industry. FOCUS is proud of its commitment to the CSP sector and we are excited about the prospects for middle market companies in this space.

The FOCUS Telecom Technology and Services group consists of two professionals with a combined 30+ years of transaction experience across a wide variety of telecommunications-related companies. The FOCUS Telecom team is uniquely qualified to help middle market clients reach their strategic objectives because the group:

- Devotes significant senior level resources to executing transactions for lower middle market clients,

- Has a breadth of knowledge that covers most segments of the telecom industry,
- Has seasoned bankers with decades of telecom industry experience,
- Has a proven transaction methodology for delivering results,
- Is equally comfortable with buy side and sell side M&A,
- Leverages an experienced team of research professionals,
- Has a national presence with coverage of both east and west coasts.

Sub Sector Definitions

Large Cap: Large, diversified communications service providers that control a significant number of former RBOC access lines and/or have a nationwide wireless operation.

Alternative Telecom: Competitive carriers that primarily provide basic voice, data and transport services to businesses and other telecom service providers.

Hosted & Managed Services: Companies that provide hosted VoIP telecom services as well as additional hosted offerings such as audio and video conferencing.

ILEC & Diversified ILEC: Non-RBOC incumbent carriers, many of which have branched out into other sectors of communications services.

Cable & Video: Incumbent cable service providers, satellite video providers and competitive video providers whose core business is providing video services to residential customers.

U.S. Summary Comments

Public Markets

On the plus side, the FOCUS Communications Service Provider Index (CSPI) turned in a positive return for the current reporting period with a three month gain of 1.5%. However, this return trailed the broader indices by a wide margin as the S&P 500 was up 8.5% and the NASDAQ was up 12.2% over the corresponding time period. The CSPI also trails the broader indices for the full year period, although the gap is certainly narrower. The return for the CSPI over the last 12 months was 24.0%, while the S&P 500 and the NASDAQ gained 28.9% and 35.2%, respectively. Sector multiples are meaningfully higher than they were a year ago. The CSPI revenue multiple increased from 2.5x to 2.8x, while the EBITDA multiple climbed from 7.3x to 8.5x.

Large Cap

The Large Cap sub sector gained 2.6% in our winter reporting period. Every stock in the index showed a positive return with the exception of Sprint, which dropped more than 15% amid concerns that the company's pending merger with T-Mobile would not receive regulatory approval. The sub sector also exhibited a strong year-over-year return with a gain of 21.0%. Most of this was due to a 36.9% increase at AT&T, but Verizon also contributed with a gain of 9.2%. Conversely, CenturyLink and Sprint both suffered double digit losses over the past 12 months. Sub sector multiples closed out the period at 2.7x revenue and 8.2x EBITDA. Both of these are higher than year-ago multiples of 2.5x revenue and 7.3x EBITDA.

Alternative Telecom

After a rough go of it in our fall report, the Alternative Telecom sub sector rebounded nicely to post a three-month uptick of 6.5%. Gains were broad-based with four of the five companies in the index delivering a positive return. Cogent Communications and GTT were the strongest performers, turning in three-month gains of 19.4% and 20.5%, respectively. For the full year, even though the sub sector as a whole was up slightly more than 10%, performance among the various companies was bifurcated. Fiber network operators Cogent Communications and Zayo Group were both up around 50% for the year, while the remaining companies in the sub sector were all down approximately 50%. Sub sector multiples ended the period slightly higher than they were a year-ago. The sub sector revenue multiple inched up from 4.7x to 4.8x, and the sub sector EBITDA multiple increased from 10.5x a year ago to its current value of 11.3x.

Hosted and Managed Services

We saw a modest gain in the Hosted and Managed Services sub sector of 2.5% this period. RingCentral was a key player in this gain as it jumped 34.2% in the past three months. However, the other major players in the unified communications space did not fare as well as 8x8 and Vonage both suffered double digit losses. We also noted a 10.6% decline at Twilio for the period. While this period was not the sub sector's strongest performance, the Hosted and Managed Services sub sector does remain the top performing sub sector in the CSPI over the past 12 months with a gain of 39.1%. Bandwidth (up 57.2%), j2 Global (up 35.1%) and RingCentral (up 104.6%) all delivered extremely impressive returns. Multiples for the sub sector remained in the stratosphere with sector revenue and EBITDA multiples closing out the period at 7.7x and 145.1x, respectively. Both of these are higher than multiples at this time last year of 6.0x revenue and 52.2x EBITDA.

ILEC and Diversified ILEC

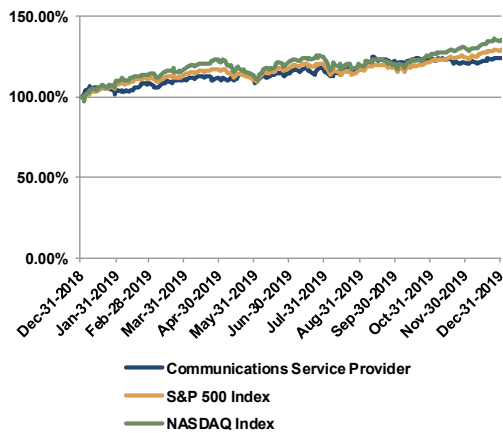
After a series of disappointing reports, the ILEC and Diversified ILEC sub sector was finally able to report some good news with a gain of 4.4% for the period. A 106.5% gain at Cincinnati Bell in the wake of its take-private announcement certainly did not hurt sub sector performance, while Alaska Communications Systems and Frontier were both in the black as well. On the negative side, Consolidated Communications and Otelco were down 18.5% and 13.5%, respectively. The sub sector is still down more than 20% for the full year period with four of the six companies in negative territory. Sub sector multiples are unchanged from a year ago, holding steady at 1.7x revenue and 5.2x EBITDA.

Cable and Video

Although the Cable and Video sub sector had a positive return of 0.3% this period, it was still the worst performing sub sector in the CSPI over the past three months. Losses at Comcast and Altice were enough of a drag to counteract double digit gains at both Cable One and Charter Communications and keep the sub sector around breakeven for the period. The picture is much rosier over the full year period with the Cable and Video sub sector sporting an impressive 36.0% year-over-year return. All of the companies in the index were in positive territory over the full year period, and all but one (WOW) enjoyed a double digit return. As one might expect given these gains, sub sector multiples are higher than they were a year ago. Multiples closed out the period at 3.0x revenue (up from 2.5x a year ago) and 9.7x EBITDA (up from 7.9x a year ago).

U.S. Communications Service Provider Sector: Public Market Summary

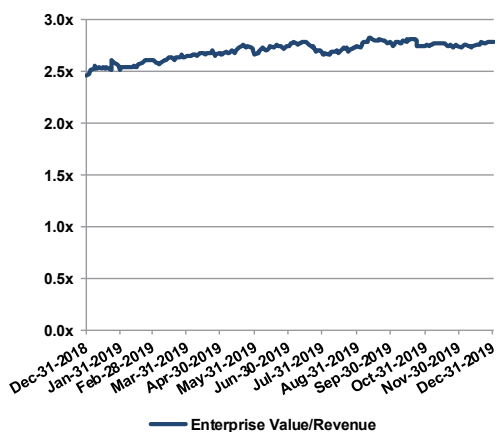
Twelve Month Index Returns



Sector and Sub Sector Returns

| | 12 Month | 3 Month |
|---------------------------------|----------|---------|
| Communications Service Provider | 24.0% | 1.5% |
| Large Cap | 21.0% | 2.6% |
| Alternative Telecom | 10.7% | 6.5% |
| Hosted and Managed Services | 39.1% | 2.5% |
| ILEC and Diversified ILEC | -24.4% | 4.4% |
| Cable and Video | 36.0% | 0.3% |
| S&P 500 | 28.9% | 8.5% |
| NASDAQ | 35.2% | 12.2% |

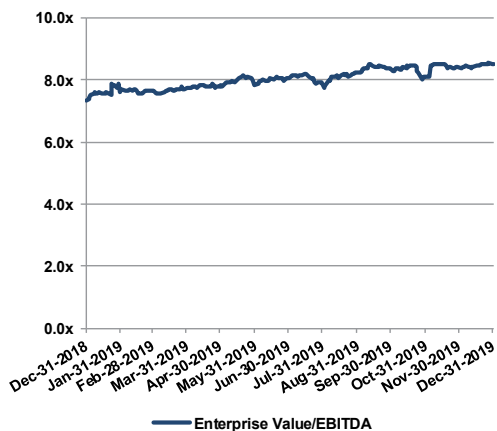
Revenue Multiple Trends



Sector and Sub Sector Revenue Multiples

| | 12/31/2019 | 12/31/2018 |
|---------------------------------|------------|------------|
| Communications Service Provider | 2.8x | 2.5x |
| Large Cap | 2.7x | 2.5x |
| Alternative Telecom | 4.8x | 4.7x |
| Hosted and Managed Services | 7.7x | 6.0x |
| ILEC and Diversified ILEC | 1.7x | 1.7x |
| Cable and Video | 3.0x | 2.5x |

EBITDA Multiple Trends



Sector and Sub Sector EBITDA Multiples

| | 12/31/2019 | 12/31/2018 |
|---------------------------------|------------|------------|
| Communications Service Provider | 8.5x | 7.3x |
| Large Cap | 8.2x | 7.3x |
| Alternative Telecom | 11.3x | 10.5x |
| Hosted and Managed Services | 145.1x | 52.2x |
| ILEC and Diversified ILEC | 5.2x | 5.2x |
| Cable and Video | 9.7x | 7.9x |

Source: Capital IQ

U.S. Communications Service Provider Stocks: M&A Summary

M&A

The 18 M&A transactions that we tracked in the Communications Service Provider sector this period was at a very similar level to what we have seen in recent reporting periods. Total transaction dollar volume was also consistent with historical norms at roughly \$2.9 billion over the past three months. For the full year, the Communications Service Provider sector had 75 transactions for just shy of \$20 billion in announced transaction dollar volume. Once again both amounts were similar to what we have seen historically, although we certainly noticed that 2019 was a big improvement over 2018 in terms of the total announced dollar volume of transactions.

Alternative Telecom

M&A activity in the Alternative Telecom sub sector picked up nicely compared to our fall report and actually accounted for two thirds of the 18 transactions in our winter report. Of these 12 transactions, six involved operators of fiber networks. Acquirers of fiber networks included both financial investors such as Barings and Ubiquity Partners as well as strategic acquirers Bluebird Network, Everstream, Tucows and Uniti. Of the remaining transactions, the investment by Oaktree Capital Management in hospitality communications provider Cloud5 Networks was perhaps the most noteworthy, while we also saw Comcast purchase wireless Internet services company Epproach Communications.

Hosted and Managed Services

Activity in the Hosted and Managed Services sub sector was light with only two transactions for the period. BCM One continued to expand its presence in the hosted communications market with the acquisition of New York-based Broadsoft partner Arena One. In addition, Sangoma Technologies expanded its service provider business by acquiring wholesale VoIP and termination services company VoIP Innovations.

ILEC and Diversified ILEC

The ILEC and Diversified ILEC sub sector had a very active period with a total of three transactions. This included the two largest transactions for the period in terms of total announced transaction dollar volume. The first of these was the acquisition of Cincinnati Bell by Brookfield Infrastructure Partners for \$2.7 billion, while Segra acquired North State Communications for \$240 million. In the sub sector's final transaction for the period, Mecklenburg Electric Cooperative acquired Buggs Island Telephone in Virginia.

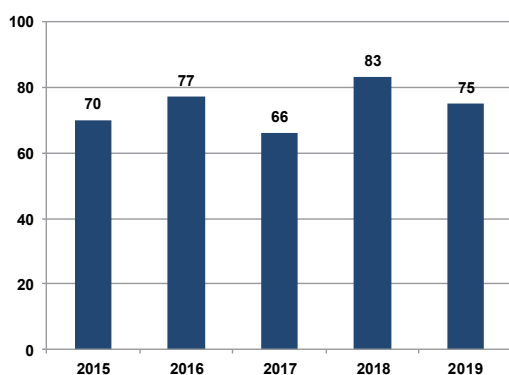
Cable and Video

The lone transaction in the Cable and Video sub sector this period was the acquisition of Fusion Media by 3E8 Broadband Solutions.

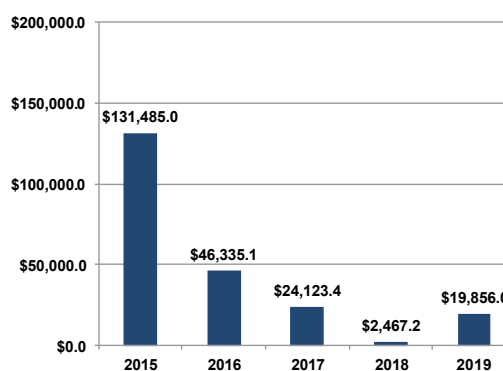
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U.S. Communication Service Provider Sector: M&A Summary

M&A Activity: Number of Transactions



M&A Activity (\$ Value of Transactions in Millions)



Transactions with Announced Multiples

Our winter reporting period had three transactions with announced multiples. Two of these were in the ILEC and Diversified ILEC sub sector, and these transactions had identical revenue multiples of 1.7x. However, at 8.2x Segra's acquisition of North State had a meaningfully higher

EBITDA multiple than the 6.8x we saw for the Brookfield Infrastructure Partners acquisition of Cincinnati Bell. In the final transaction with an announced multiple, Sangoma Technologies' \$36 million purchase of VoIP Innovations was done at 1.9x revenue and 6.4x EBITDA.

M&A Announced Transactions (7/1/19 – 12/31/19)

| Acquiror | Target | Sector | Date Announced | Purchase Price | Description |
|------------------------------------|------------------------------------|---------------------------------------|----------------|----------------|--|
| Brookfield Infrastructure Partners | Cincinnati Bell | Diversified ILEC | 12/23/19 | \$2,650.6 | Diversified telecommunications and technology services for residential and business customers. |
| 3E8 Broadband Solutions | Fusion Media | Cable and Video | 12/17/19 | NA | Provides internet, cable television and telephone services. |
| Bluebird Network | Illinois Network Alliance | Alternative Telecom Service Providers | 12/10/19 | NA | Provides internet and fiber transport network solutions in Illinois. |
| Ubiquity Partners | Netly | Alternative Telecom Service Providers | 12/10/19 | NA | City-wide, open-access fiber network for Solana Beach, California and surrounding areas. |
| Segra | North State Communications | Diversified ILEC | 12/9/19 | \$240.0 | Fiber-based internet services including telephone, broadband internet and cable TV for businesses and consumers. |
| AppSmart | Converged Network Services Group | Alternative Telecom Service Providers | 12/6/19 | NA | Master agent for the design and delivery of communications and technology solutions. |
| BCM One | Arena One | Hosted and Managed Telecom Services | 12/5/19 | NA | Facilities-based provider of Unified Communications as a Service using the BroadWorks platform. |
| Barings | GigaSphere | Alternative Telecom Service Providers | 11/13/19 | NA | Provides fiber-based internet and networks to the multifamily and commercial industries. |
| Parity Technology Solutions | Liveport | Alternative Telecom Service Providers | 11/7/19 | NA | Wireless internet access systems, in-room entertainment and smart home technology for hotels and student housing businesses. |
| Uniti | ANS | Alternative Telecom Service Providers | 11/7/19 | \$6.3 | Owns and operates an 85 mile last mile fiber network across Georgia. |
| Tucows | Cedar Holdings Group | Alternative Telecom Service Providers | 11/1/19 | \$11.0 | Builds fiber to enterprise, anchor institution and residential customers in Colorado and New Mexico. |
| Oaktree Capital Management | Cloud5 Communications | Alternative Telecom Service Providers | 10/22/19 | NA | Provides SIP trunking and hosted PBX services to the hospitality sector. |
| Sangoma Technologies | VoIP Innovations | Hosted and Managed Telecom Services | 10/18/19 | \$36.0 | Provides wholesale VoIP and termination services and related communications platform-as-a-service for developers and enterprises. |
| Mecklenburg Electric Cooperative | Buggs Island Telephone | Diversified ILEC | 10/16/19 | NA | Provides communications services and products along with the latest wireless technology in south central Virginia. |
| Comcast | Epproach Communications | Alternative Telecom Service Providers | 10/15/19 | NA | Provider of WiFi and Internet services based in Wilmington, North Carolina. |
| Baymark Partners | Slaphey Communications | Alternative Telecom Service Providers | 10/14/19 | NA | Communications, data, networking and security services for business customers. |
| EATELORP | PremierOne.com | Alternative Telecom Service Providers | 10/1/19 | NA | Internet service provider based in Louisiana. |
| Everstream Solutions | DataBank (LightBound Fiber Assets) | Alternative Telecom Service Providers | 10/1/19 | NA | Fiber telecommunications services to businesses in the Indianapolis market. |
| Digerati Technologies | Nexogy | Hosted and Managed Telecom Services | 9/24/19 | NA | Provides cloud-based unified communications, Internet and managed services for small to medium-sized businesses. |
| Watch Communications | Beyond Media | Alternative Telecom Service Providers | 9/17/19 | NA | Wireless Internet service provider serving rural communities in Eastern Illinois and Western Indiana. |
| Oblong Industries | Glowpoint | Hosted and Managed Telecom Services | 9/16/19 | NA | Managed service provider of video collaboration and network applications. |
| AppSmart | Telegation | Alternative Telecom Service Providers | 9/9/19 | NA | Master agent providing a comprehensive range of voice, Internet, mobility, cable, data, cloud, hosted PBX and managed IT services. |
| AppSmart | World Telecom Group | Alternative Telecom Service Providers | 9/4/19 | NA | Master agent that distributes voice and data connectivity services. |
| Grain Management | Hunter Communications | Alternative Telecom Service Providers | 8/20/19 | NA | Provides fiber-optic telecommunications services to businesses and consumers in Oregon and throughout the Pacific Northwest. |

M&A Announced Transactions (7/1/19 – 12/31/19) continued

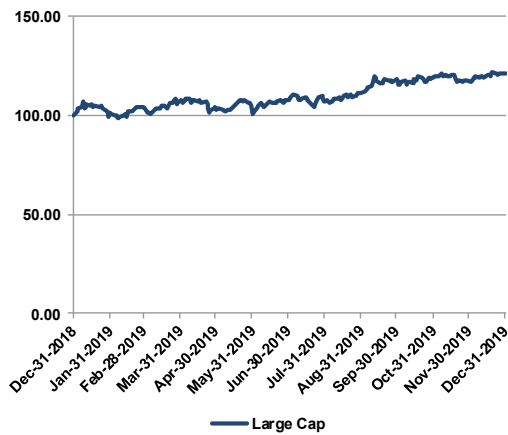
| Acquiror | Target | Sector | Date Announced | Purchase Price | Description |
|--------------------------|--|---------------------------------------|----------------|----------------|--|
| Grain Management | Summit Broadband | Cable and Video | 8/19/19 | NA | Voice, video, data and high-speed internet services to commercial and residential customers in Florida and wholesale carrier services. |
| Siris Capital | TelePacific Communications | Alternative Telecom Service Providers | 8/19/19 | NA | Internet access, colocation hosting, hosted VoIP and PBX and other services for small- to medium-sized businesses and enterprises. |
| Hargray Communications | Kingsland Cable | Cable and Video | 8/13/19 | NA | Provides broadband internet and cable television services for businesses and consumers in Georgia. |
| Telephone & Data Systems | Continuum Communications System (Cable and Broadband Assets) | Cable and Video | 8/13/19 | \$80.0 | North Carolina-based Internet, video and voice operator owned by the municipalities of Mooresville and Davidson. |
| Grain Management | Ritter Communications | Diversified ILEC | 8/12/19 | NA | Internet, phone, video services and cloud solutions for business, residential and wholesale customers in Tennessee and Arkansas. |
| InSite Wireless Group | Agile Networks | Alternative Telecom Service Providers | 8/9/19 | NA | Provides telecommunications solutions over hybrid fiber wireless broadband data networks. |
| Utility Telephone | Freeway Communications | Hosted and Managed Telecom Services | 8/9/19 | NA | Provides VoIP, broadband and colocation services for businesses globally. |
| GTCR | Eagle Communications | Cable and Video | 7/30/19 | NA | Operates cable TV systems in Kansas, Nebraska and Colorado. |
| GTCR | Vyve Broadband | Cable and Video | 7/30/19 | NA | Provides cable television, broadband Internet and VoIP services for consumers and businesses. |
| Single Digits | Sunray Technology Ventures | Alternative Telecom Service Providers | 7/2/19 | NA | Hospitality Internet service for a chain of hotels. |
| CIBL | LICT (New Hampshire Operations) | Diversified ILEC | 7/1/19 | NA | Broadband and communications services to an approximately 35 -square-mile area in northern New Hampshire. |

M&A Announced Transactions with Revenue Multiples (1/1/19 – 12/31/19)

| Acquiror | Target | Sector | Date Announced | Purchase Price | Revenue Multiple | EBITDA Multiple | Description |
|---|--|---------------------------------------|----------------|----------------|------------------|-----------------|---|
| Brookfield Infrastructure Partners | Cincinnati Bell | Diversified ILEC | 12/23/19 | \$2,650.6 | 1.7 x | 6.8 x | Diversified telecommunications and technology services for residential and business customers. |
| Segra | North State Communications | Diversified ILEC | 12/9/19 | \$240.0 | 1.7 x | 8.2 x | Fiber-based internet services including telephone, broadband internet and cable TV for businesses and consumers. |
| Sangoma Technologies | VoIP Innovations | Hosted and Managed Telecom Services | 10/18/19 | \$36.0 | 1.9 x | 6.4 x | Provides wholesale VoIP and termination services and related communications platform-as-a-service for developers and enterprises. |
| Telephone & Data Systems | Continuum Communications System (Cable and Broadband Assets) | Cable and Video | 8/13/19 | \$80.0 | 3.8 x | NA | North Carolina-based Internet, video and voice operator owned by the municipalities of Mooresville and Davidson. |
| WaveDivision Capital and Searchlight Capital Partners | Frontier (Operations in Washington, Oregon, Idaho and Montana) | Diversified ILEC | 5/29/19 | \$1,352.0 | 2.2 x | 5.0 x | Communications services to consumer, commercial and wholesale customers in Washington, Oregon and Idaho. |
| Digital Colony Partners and EQT Infrastructure | Zayo Group | Alternative Telecom Service Providers | 5/8/19 | \$14,258.9 | 5.5 x | 12.0 x | Provides bandwidth infrastructure solutions for the communications industry in the United States, Canada and Europe. |
| Cable One | Fidelity Communications | Cable and Video | 4/1/19 | \$525.9 | NA | 11.7 x | Cable operator serving customers in Arkansas, Illinois, Louisiana, Missouri, Oklahoma and Texas. |
| Trive Capital | WindStream (Earthlink Assets) | Alternative Telecom Service Providers | 1/2/19 | \$330.0 | 1.7 x | NA | Offers internet access, premium email, web hosting and privacy and data security products and services. |

Sub Sector Analysis: Large Cap

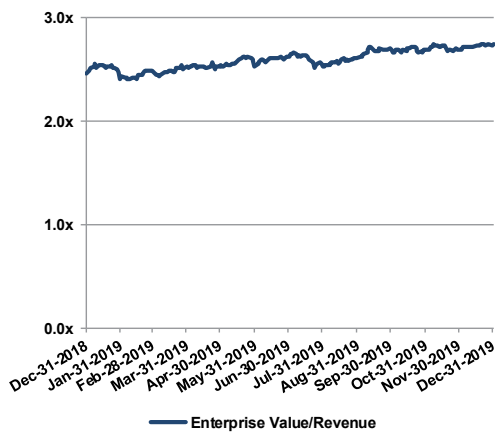
Twelve Month Index Returns



Company Returns

| | 12 Month | 3 Month |
|-----------------|----------|---------|
| Large Cap Index | 21.0% | 2.6% |
| AT&T | 36.9% | 3.3% |
| CenturyLink | -12.8% | 5.8% |
| Sprint | -10.5% | -15.6% |
| Verizon | 9.2% | 1.7% |

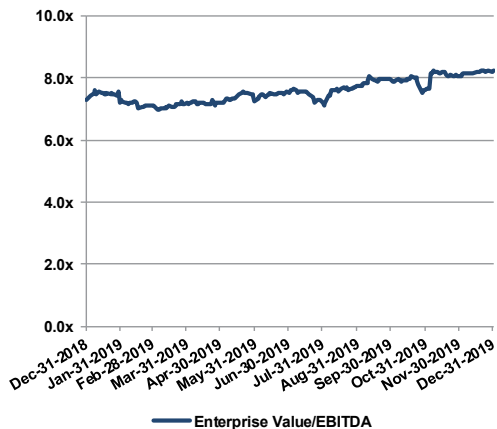
Revenue Multiple Trends



Company Revenue Multiples

| | 12/31/2019 | 12/31/2018 |
|-----------------|------------|------------|
| Large Cap Index | 2.7x | 2.5x |
| AT&T | 2.7x | 2.3x |
| CenturyLink | 2.2x | 2.2x |
| Sprint | 1.9x | 1.7x |
| Verizon | 2.9x | 2.6x |

EBITDA Multiple Trends



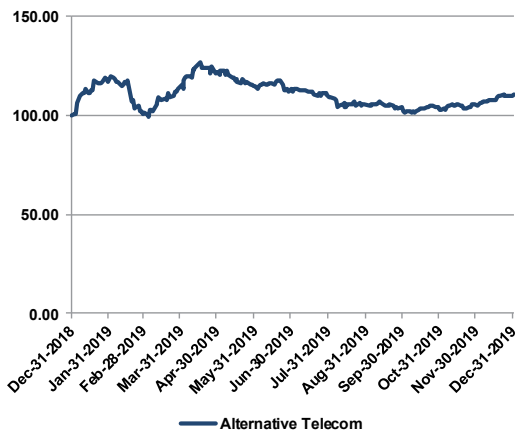
Company EBITDA Multiples

| | 12/31/2019 | 12/31/2018 |
|-----------------|------------|------------|
| Large Cap Index | 8.2x | 7.3x |
| AT&T | 9.0x | 6.8x |
| CenturyLink | 5.4x | 5.8x |
| Sprint | 5.2x | 4.5x |
| Verizon | 7.9x | 7.1x |

Source: Capital IQ

Sub Sector Analysis: Alternative Telecom

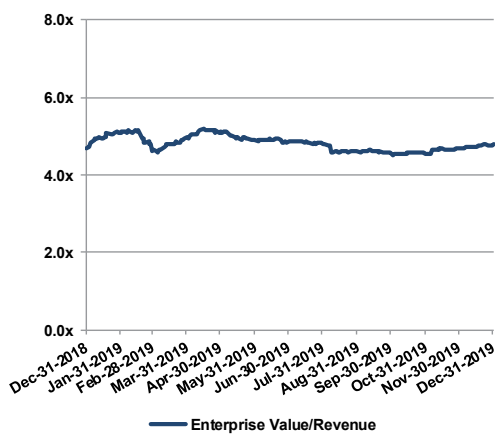
Twelve Month Index Returns



Company Returns

| | 12 Month | 3 Month |
|---------------------------|----------|---------|
| Alternative Telecom Index | 10.7% | 6.5% |
| Boingo | -46.8% | -1.4% |
| Cogent Communications | 45.6% | 19.4% |
| GTT | -52.0% | 20.5% |
| Uniti | -47.3% | 5.7% |
| Zayo Group | 51.7% | 2.2% |

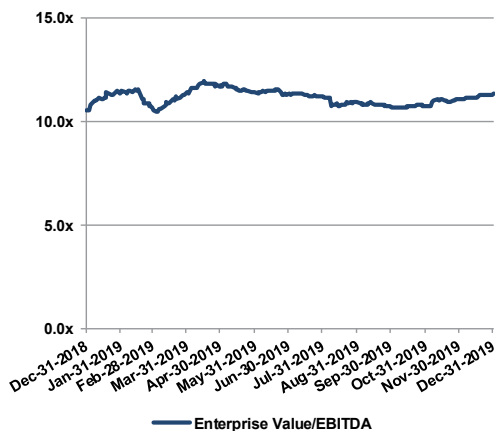
Revenue Multiple Trends



Company Revenue Multiples

| | 12/31/2019 | 12/30/2018 |
|---------------------------|------------|------------|
| Alternative Telecom Index | 4.8x | 4.7x |
| Boingo | 2.2x | 3.6x |
| Cogent Communications | 6.9x | 5.0x |
| GTT | 2.4x | 3.0x |
| Uniti | 6.3x | 7.5x |
| Zayo Group | 5.6x | 4.2x |

EBITDA Multiple Trends



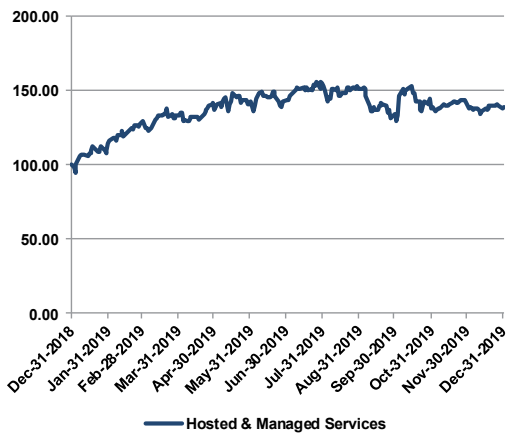
Company EBITDA Multiples

| | 12/31/2019 | 12/31/2018 |
|---------------------------|------------|------------|
| Alternative Telecom Index | 11.3x | 10.5x |
| Boingo | 7.7x | 11.2x |
| Cogent Communications | 20.8x | 15.3x |
| GTT | 10.0x | 13.5x |
| Uniti | 8.6x | 9.6x |
| Zayo Group | 12.4x | 9.2x |

Source: Capital IQ

Sub Sector Analysis: Hosted & Managed Services

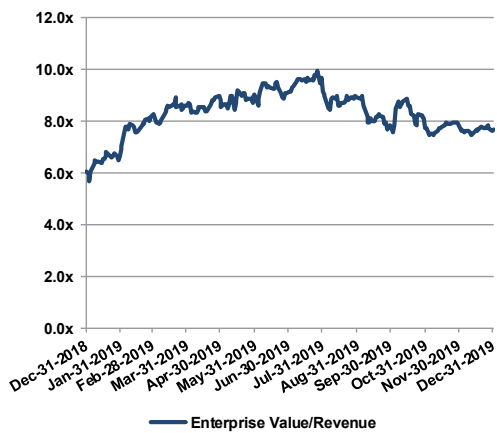
Twelve Month Index Returns



Company Returns

| | 12 Month | 3 Month |
|---------------------------------|----------|---------|
| Hosted & Managed Services Index | 39.1% | 2.5% |
| 8x8 | 1.4% | -11.7% |
| Bandwidth | 57.2% | -1.6% |
| j2 Global | 35.1% | 3.2% |
| RingCentral | 104.6% | 34.2% |
| Twilio | 10.1% | -10.6% |
| Vonage | -15.1% | -34.4% |

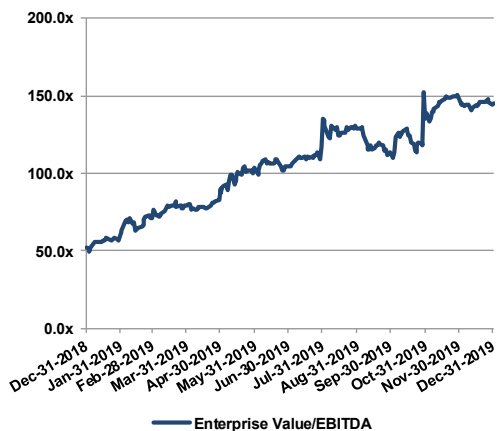
Revenue Multiple Trends



Company Revenue Multiples

| | 12/31/2019 | 12/31/2018 |
|---------------------------------|------------|------------|
| Hosted & Managed Services Index | 7.7x | 6.0x |
| 8x8 | 5.0x | 4.7x |
| Bandwidth | 5.9x | 3.6x |
| j2 Global | 4.4x | 3.4x |
| RingCentral | 17.1x | 9.5x |
| Twilio | 12.1x | 13.1x |
| Vonage | 2.0x | 2.2x |

EBITDA Multiple Trends



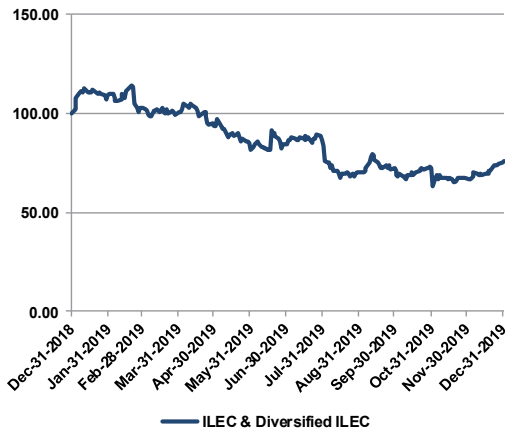
Company EBITDA Multiples

| | 12/31/2019 | 12/31/2018 |
|---------------------------------|------------|------------|
| Hosted & Managed Services Index | 145.1x | 52.2x |
| 8x8 | NM | NM |
| Bandwidth | NM | 66.6x |
| j2 Global | 11.7x | 9.2x |
| RingCentral | 1664.9x | 686.6x |
| Twilio | NM | NM |
| Vonage | 22.3x | 16.7x |

Source: Capital IQ

Sub Sector Analysis: ILEC & Diversified ILEC

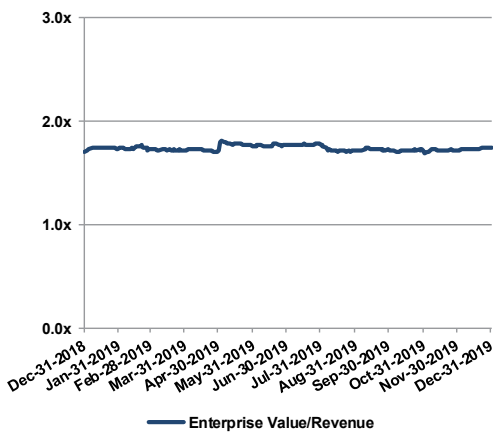
Twelve Month Index Returns



Company Returns

| | 12 Month | 3 Month |
|-------------------------------|----------|---------|
| ILEC & Diversified ILEC Index | -24.4% | 4.4% |
| Alaska Communications Systems | 22.9% | 2.9% |
| Consolidated Communications | -60.7% | -18.5% |
| Cincinnati Bell | 34.6% | 106.5% |
| Frontier | -62.6% | 2.6% |
| Otelco | -38.1% | -13.5% |
| Telephone & Data Systems | -21.9% | -1.4% |

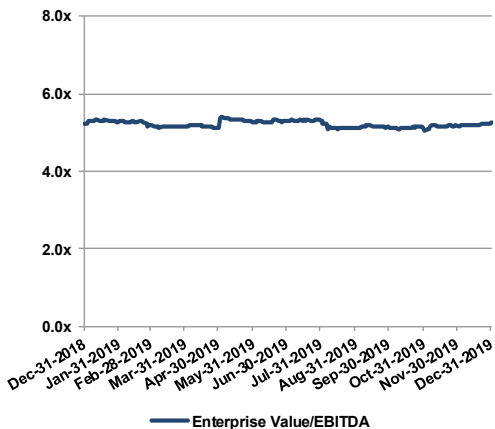
Revenue Multiple Trends



Company Revenue Multiples

| | 12/31/2019 | 12/31/2018 |
|-------------------------------|------------|------------|
| ILEC & Diversified ILEC Index | 1.7x | 1.7x |
| Alaska Communications Systems | 1.4x | 1.0x |
| Consolidated Communications | 2.0x | 2.2x |
| Cincinnati Bell | 1.7x | 1.8x |
| Frontier | 2.1x | 2.0x |
| Otelco | 1.6x | 1.9x |
| Telephone & Data Systems | 1.2x | 1.1x |

EBITDA Multiple Trends



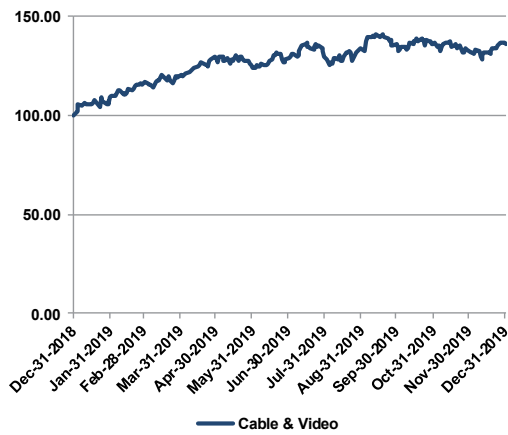
Company EBITDA Multiples

| | 12/31/2019 | 12/31/2018 |
|-------------------------------|------------|------------|
| ILEC & Diversified ILEC Index | 5.2x | 5.2x |
| Alaska Communications Systems | 5.7x | 4.0x |
| Consolidated Communications | 5.7x | 6.5x |
| Cincinnati Bell | 6.8x | 6.9x |
| Frontier | 5.1x | 5.0x |
| Otelco | 4.4x | 5.0x |
| Telephone & Data Systems | 5.7x | 5.4x |

Source: Capital IQ

Sub Sector Analysis: Cable & Video

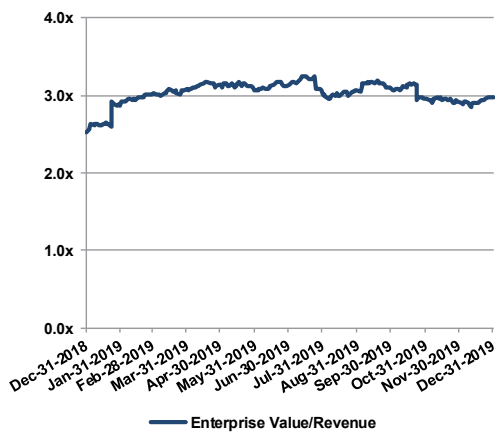
Twelve Month Index Returns



Company Returns

| | 12 Month | 3 Month |
|------------------------|----------|---------|
| Cable & Video Index | 36.0% | 0.3% |
| Altice | 65.5% | -4.7% |
| Cable One | 81.5% | 18.6% |
| Charter Communications | 70.2% | 17.7% |
| Comcast | 32.1% | -0.2% |
| Dish Network | 42.1% | 4.1% |
| WOW | 4.1% | 20.5% |

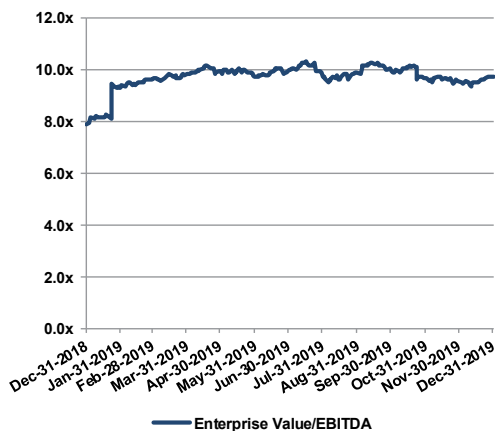
Revenue Multiple Trends



Company Revenue Multiples

| | 12/31/2019 | 12/31/2018 |
|------------------------|------------|------------|
| Cable & Video Index | 3.0x | 2.5x |
| Altice | 4.3x | 3.6x |
| Cable One | 8.7x | 5.2x |
| Charter Communications | 4.1x | 3.3x |
| Comcast | 2.8x | 2.3x |
| Dish Network | 2.5x | 1.9x |
| WOW | 2.6x | 2.5x |

EBITDA Multiple Trends



Company EBITDA Multiples

| | 12/31/2019 | 12/31/2018 |
|------------------------|------------|------------|
| Cable & Video Index | 9.7x | 7.9x |
| Altice | 9.9x | 8.4x |
| Cable One | 19.0x | 11.6x |
| Charter Communications | 11.6x | 9.1x |
| Comcast | 9.2x | 7.3x |
| Dish Network | 12.8x | 8.9x |
| WOW | 7.6x | 7.5x |

Source: Capital IQ

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