

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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IN THIS ISSUE

- 2 Introduction and Sub Sector Definitions
- 3 U.S. Summary Comments: Public Markets
- 4 Public Market Summary Charts 1-6
- 5 U.S. Communications Service Provider Stocks: M&A Summary Charts 1-2
- 6 Announced Transactions
- 7 Announced Transactions with Revenue Multiples
- 8 Sub Sector Analysis: Large Cap Telecom Charts 1-6
- 9 Sub Sector Analysis: Alternative Telecom Charts 1-6
- 10 Sub Sector Analysis: Hosted and Managed Services Charts 1-6
- 11 Sub Sector Analysis: ILEC and Diversified ILEC Charts 1-6
- 12 Sub Sector Analysis: Cable and Video Charts 1-6
- 13 FOCUS Telecom Technology and Services Team

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
- 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

The FOCUS Communications Service Provider Index (CSPI) once again ended up in negative territory after it dropped 7.9% in the past three months. This marks the third straight period where the sector posted a negative return. To say that the losses were broad based is almost an understatement. Not only was every sub sector in negative territory this period, but every single company delivered a negative return as well. The broader indices were also down this period with the S&P 500 and the NASDAQ falling 5.0% and 9.1%, respectively. Not surprisingly given this recent string of losses, the CSPI is also deeply in negative territory for the full year period with a decline of slightly more than 20%. This is despite the fact that the broader indices were in positive territory over this time frame. The S&P 500 was up 14.0% and the NASDAQ was up 7.3% over the past year. Sector multiples are meaningfully lower than they were a year ago. The sector revenue multiple went from 3.0x to 2.6x, while the sector EBITDA multiple went from 8.5x to 7.4x.

Large Cap

While the Large Cap sub sector fell 3.1% this period, this performance was actually good enough to make it the top performing sub sector in the CSPI over these past three months. Lumen had the steepest drop at 10.2%, while AT&T fell 3.9% and Verizon fell 2.0%. The sub sector is also down 16.9% for the full year period with all three companies suffering double digit declines. Sub sector multiples fell from 2.6x revenue and 6.9x EBITDA a year ago to 2.5x revenue and 6.6x EBITDA currently.

Alternative Telecom

After a strong gain in our winter reporting period, the Alternative Telecom sub sector was pushed into the red this period with a drop of 5.6%. Cogent Communications exhibited the sharpest decline as it dropped 9.3% in the past three months. The sub sector still remains in positive territory for the full year period with a gain of 9.1%. This makes it the only sub sector in the CSPI that currently has a positive annual return. Multiple performance for the sub sector was mixed. The sub sector revenue multiple inched up slightly from 7.1x a year ago to 7.4x currently, but the sub sector EBITDA multiple declined from 11.9x to 11.5x over the same time period.

Hosted and Managed Services

The Hosted and Managed Services sub sector is officially in free fall as it followed up a double digit decline in our winter report with a 33.6% decline this period. Vonage and Ziff Davis were the only two companies in the sub sector to avoid a loss of 20% or more. The picture is not much brighter for the full year period with the sub sector down just shy of 50% over this time frame. The sub sector revenue multiple closed out the period at 6.1x, which is less than half of the multiple at this time last year of 15.4x. The sub sector's EBITDA multiple is currently not meaningful because the sub sector as a whole has negative EBITDA.

ILEC and Diversified ILEC

The ILEC and Diversified ILEC sub sector suffered yet another loss this reporting period with a decline of 10.3% in the past three months. Consolidated Communications was down 21.1%, while Telephone & Data Systems fared slightly better with a three-month loss of "only" 6.3%. Compared to last year, the sub sector is down 17.8%, with both companies in the sub sector experiencing similar returns. Even with the decline in sub sector value, sub sector multiples are actually a bit higher than they were at this time last year. The sub sector revenue multiple increased from 1.4x to 1.6x, and the sub sector EBITDA multiple increased from 4.4x to 5.3x

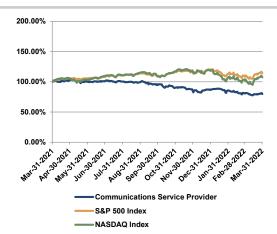
Cable and Video

The Cable and Video sub sector was yet another sub sector that continued its downward trend, falling 7.6% in the past three months. This included a 22.9% drop at Altice as well as declines in excess of 15% at each of Cable One, Charter Communications and WOW. The sub sector is also down 16.0% for the full year, with WOW as the only company in the sub sector to deliver a positive return over this time frame. The sub sector revenue multiple declined from 3.4x a year ago to 2.7x currently. The sub sector EBITDA multiple had a similar decline, falling from 10.8x to 8.3x over the same time period.



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

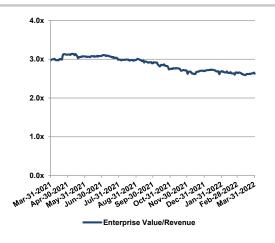
Twelve Month Index Returns



Sector and Sub Sector Returns

	12 Month	3 Month
Communications Service Provider	-20.2%	-7.9%
Large Cap	-16.9%	-3.1%
Alternative Telecom	9.1%	-5.6%
Hosted and Managed Services	-49.8%	-33.6%
ILEC and Diversified ILEC	-17.8%	-10.3%
Cable and Video	-16.0%	-7.6%
S&P 500	14.0%	-5.0%
NASDAQ	7.3%	-9.1%

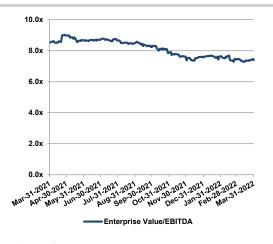
Revenue Multiple Trends



Sector and Sub Sector Revenue Multiples

	3/31/2022	3/31/2021
Communications Service Provider	2.6x	3.0x
Large Cap	2.5x	2.6x
Alternative Telecom	7.4x	7.1x
Hosted and Managed Services	6.1x	15.4x
ILEC and Diversified ILEC	1.6x	1.4x
Cable and Video	2.7x	3.4x

EBITDA Multiple Trends



Sector and Sub Sector EBITDA Multiples

	3/31/2022	3/31/2021
Communications Service Provider	7.4x	8.5x
Large Cap	6.6x	6.9x
Alternative Telecom	11.5x	11.9x
Hosted and Managed Services	NM	278.5x
ILEC and Diversified ILEC	5.3x	4.4x
Cable and Video	8.3x	10.8x



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

M&A

After a strong finish to 2021, the Communications Service Provider sector kicked off 2022 with mixed M&A signals. On the one hand, the total number of transactions remained high at 27 over these past three months. However, total announced transaction dollar volume for the period was a paltry \$68 million. While the low dollar volume figure is certainly influenced by the fact that only one transaction this period had an announced dollar value, it is also clear that the past three months lacked the kind of blockbuster deal that has become increasingly common over the past several years. We will certainly continue to monitor this trend closely as we progress through the 2022 calendar year.

Alternative Telecom

The Alternative Telecom sub sector was once again very active with 18 total transactions this period. Fiber network operators remained attractive targets as evidenced by the MetroNet acquisition of Vexus Fiber, the Clearwave Fiber acquisition of RG Fiber and the Goldman Sachs platform acquisition of ImOn Communications. In addition, we also saw the establishment of a new fiber platform in the MDU space with an investment in Mereo Networks by Highway 89 Ventures followed by three subsequent acquisitions. However, we also saw a number of transactions for less asset intensive companies. UPSTACK continued to roll

up telecom agencies with another four acquisitions. In addition, Lingo Communications acquired BullsEye Telecom. Finally, we noted that even a fiber network operator like Zayo made a deal for an asset light company with its pickup of SD-WAN specialist QOS Networks.

Hosted and Managed Services

M&A activity in the Hosted and Managed Services sub sector also continued at a brisk pace with seven transactions over the past three months. This included the only transaction with an announced dollar value; the \$68.0 million acquisition of NetFortris by Sangoma Technologies. We also noted that Digerati Technologies continued to be an active acquirer as it announced acquisitions of SkyNet Telecom and NextLevel Internet. Both Buckeye Telesystem and CallTower also returned to the deal table and inked acquisitions. Finally, the sub sector saw a new private equity-backed platform emerge with the acquisition of Fusion Connect by Morgan Stanley.

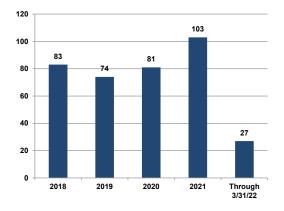
ILEC and Diversified ILEC

The lone transaction in the ILEC and Diversified ILEC sub sector was the acquisition of Maine-based Unitel by ILEC consolidator Direct Communications.

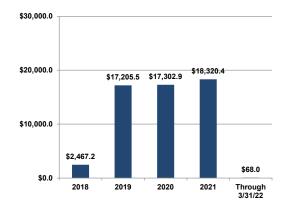
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U.S. Communication Service Provider Sector: M&A Summary

M&A Activity: Number of Transactions



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





Cable and Video

The Cable and Video sub sector also had only a single transaction this period. This was the divestiture of Consolidated Communications' Kansas City operations to Alinda Capital Partners.

Transactions with Announced Multiples

For the second straight reporting period only the Hosted and Managed Services sub sector had a transaction with an announced multiple. This was the acquisition of NetFortris by Sangoma Technologies for 1.4x revenue.

M&A Announced Transactions (1/1/22 - 3/31/22)

Acquiror	Target	Sector	Date Announced	Purchase Price	Description
Lingo Communications	BullsEye Telecom	Alternative Telecom Service Providers	3/29/22	NA	SD-WAN, security, UCaaS, Internet connectivity, managed Wi-Fi, POTS and POTS alternative communications solutions.
Sangoma Technologies	NetFortris	Hosted and Managed Telecom Services	3/29/22	\$68.0	Cloud-based managed network, cloud communications and security SaaS, managed services and hosted productivity applications.
Clearwave Fiber	RG Fiber	Alternative Telecom Service Providers	3/24/22	NA	High-capacity fiber network service provider located near Kansas City, Kansas.
UPSTACK	Meridian Network Services	Alternative Telecom Service Providers	3/24/22	NA	Full-service telecommunications agency serving both small-to-medium businesses and enterprises.
Astound Broadband	FastMesh Internet	Alternative Telecom Service Providers	3/16/22	NA	Wireless residential Wi-Fi services to apartment buildings and housing communities in the Pacific Northwest.
Alinda Capital Partners	Consolidated Communications (Kansas City Assets)	Cable and Video Service Providers	3/3/22	NA	Delivers broadband and network solutions to residential, commercial and carrier customers in Kansas City.
CallTower	OneStream Networks	Hosted and Managed Telecom Services	3/3/22	NA	Cloud-connected and premise-based SIP voice services.
Zayo Group	Education Networks of America	Alternative Telecom Service Providers	3/3/22	NA	Connectivity, communication, cloud and security solutions to education, library, healthcare and government organizations.
Direct Communications	Unitel	Diversified ILEC	3/2/22	NA	High speed internet and voice services to residential and business customers in Unity, Maine.
UPSTACK	DVP Technologies	Alternative Telecom Service Providers	2/24/22	NA	Managed cloud, network, telecommunications and consulting services to businesses.
UPSTACK	Subsidium Technologies	Alternative Telecom Service Providers	2/24/22	NA	Managed communication, cloud, collaboration and network connectivity services.
Goldman Sachs Asset Management	ImOn Communications	Alternative Telecom Service Providers	2/17/22	NA	Fiber-optic internet broadband services to consumers and businesses in Eastern Iowa.
UPSTACK	RDS Technologies	Alternative Telecom Service Providers	2/16/22	NA	Independent telecom agent specializing in delivering complex connectivity, cloud and data center solutions.
Digerati Technologies	NextLevel Internet	Hosted and Managed Telecom Services	2/8/22	NA	Cloud-based unified communications and collaboration, contact center and managed connectivity services.
UPSTACK	Lunada Technologies	Alternative Telecom Service Providers	2/2/22	NA	Network infrastructure, connectivity, colocation and communications services to small and medium businesses.
MetroNet Fiber	Vexus Fiber	Alternative Telecom Service Providers	1/27/22	NA	Builds and operates fiber optic networks that connect directly to homes and businesses in Texas, New Mexico and Louisiana.
Morgan Stanley	Fusion Connect	Hosted and Managed Telecom Services	1/20/22	NA	Hosted and managed cloud communications services including VoIP, collaboration, call center and unified communications.
Unknown	Wide Voice	Alternative Telecom Service Providers	1/20/22	NA	Owns and operates an automated, hybrid TDM/IP tandem switching network that enables internet protocol enabled services.
Buckeye Telesystem	Abacus Group	Hosted and Managed Telecom Services	1/12/22	NA	Provider of unified communications and managed IT services headquartered in Boston, Massachusetts.
Zayo Group	QOS Networks	Alternative Telecom Service Providers	1/12/22	NA	Managed service provider of SD-WAN solutions utilizing a variety of SD-WAN platforms.
Netlink Voice	Phonesuite	Hosted and Managed Telecom Services	1/10/22	NA	Hospitality communication solutions for hotel managers and owners that support both SIP and analog phones.



M&A Announced Transactions (1/1/22 - 3/31/22) continued

Acquiror	Target	Sector	Date Announced	Purchase Price	Description
Digerati Technologies	SkyNet Telecom	Hosted and Managed Telecom Services	1/5/22	NA	Hosted PBX/VoIP, cloud communications and broadband internet services to small and medium-sized businesses.
Mereo Networks	Broadband Holdings	Alternative Telecom Service Providers	1/5/22	NA	Provides fiber Internet services to MDUs and developers in Arizona.
Mereo Networks	Digital Home Lifestyles	Alternative Telecom Service Providers	1/5/22	NA	Provides fiber Internet services to MDUs and developers in Arizona.
Mereo Networks	Vicidiem	Alternative Telecom Service Providers	1/5/22	NA	Provides fiber Internet services to MDUs and developers in Utah.
Highway 89 Ventures	Mereo Networks	Alternative Telecom Service Providers	1/5/22	NA	Provides carrier telecom and network integration, managed network and managed Wi-Fi services for businesses and consumers.
Great Plains Communications	Fiber Nebraska (Wood River Network)	Alternative Telecom Service Providers	1/4/22	NA	10.6-mile fiber telecommunication network in Wood River, Nebraska.

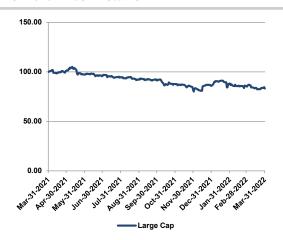
M&A Announced Transactions with Revenue Multiples (4/1/21 - 3/31/22)

Acquiror	Target	Sector	Date Announced	Purchase Price	Revenue Multiple	EBITDA Multiple	Description
Sangoma Technologies	NetFortris	Hosted and Managed Telecom Services	3/29/22	\$68.0	1.4 x	NA	Cloud-based managed network, cloud communications and security SaaS, managed services and hosted productivity applications.
8x8	Fuze	Hosted and Managed Telecom Services	12/1/21	\$250.0	1.9 x	NA	Unified communications SaaS for businesses that enables use of voice, video, text, presence, instant messaging and collaboration.
Ericsson	Vonage	Hosted and Managed Telecom Services	11/22/21	\$6,046.2	4.7 x	44.6 x	Business-to-business cloud communications company that enables software developers to build communications capabilities.
Apollo Global Management	Lumen (ILEC Assets)	Diversified ILEC	8/3/21	\$7,500.0	NA	5.5 x	Incumbent telecom serving more than 6 million homes and businesses across the Midwest and Southeast U.S.



Sub Sector Analysis: Large Cap

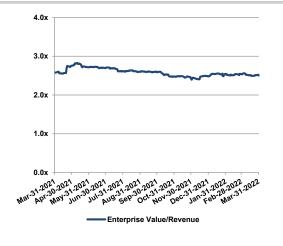
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Large Cap Index	-16.9%	-3.1%
AT&T	-21.9%	-3.9%
Lumen	-15.6%	-10.2%
Verizon	-12.4%	-2.0%

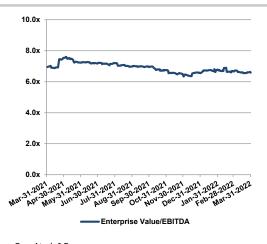
Revenue Multiple Trends



Company Revenue Multiples

	3/31/2022	3/31/2021
Large Cap Index	2.5x	2.6x
AT&T	2.3x	2.4x
Lumen	2.1x	2.3x
Verizon	2.9x	2.9x

EBITDA Multiple Trends



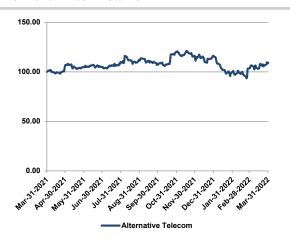
Company EBITDA Multiples

	3/31/2022	3/31/2021
Large Cap Index	6.6x	6.9x
AT&T	6.9x	7.8x
Lumen	5.2x	5.6x
Verizon	8.6x	7.7x



Sub Sector Analysis: Alternative Telecom

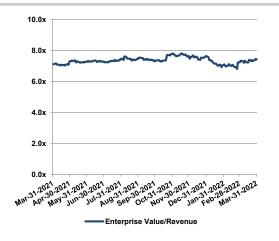
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Alternative Telecom Index	9.1%	-5.6%
Cogent Communications	-3.5%	-9.3%
Uniti	24.8%	-1.8%

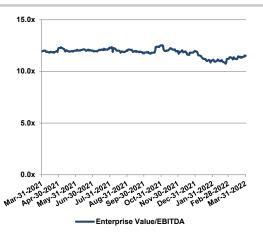
Revenue Multiple Trends



Company Revenue Multiples

	3/31/2022	3/31/2021
Alternative Telecom Index	7.4x	7.1x
Cogent Communications	7.1x	7.2x
Uniti	7.6x	7.0x

EBITDA Multiple Trends



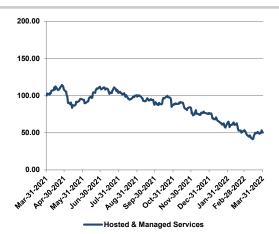
Company EBITDA Multiples

	3/31/2022	3/31/2021
Alternative Telecom Index	11.5x	11.9x
Cogent Communications	20.1x	20.8x
Uniti	9.9x	9.8x



Sub Sector Analysis: Hosted & Managed Services

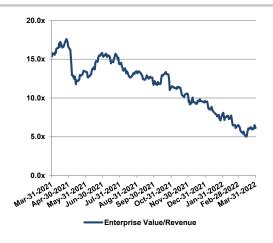
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Hosted & Managed Services Index	-49.8%	-33.6%
8x8	-61.2%	-24.9%
American Virtual Cloud Tech.	-83.5%	-61.5%
Bandwidth	-74.4%	-54.9%
Crexendo	-37.4%	-27.4%
RingCentral	-60.7%	-37.4%
Twilio	-51.6%	-37.4%
Vonage	71.7%	-2.4%
Ziff Davis	-19.3%	-12.7%

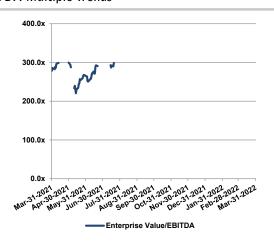
Revenue Multiple Trends



Company Revenue Multiples

	3/31/2022	3/31/2021
Hosted & Managed Services Index	6.1x	15.4x
8x8	2.9x	7.0x
American Virtual Cloud Tech.	4.8x	1.6x
Bandwidth	2.0x	8.7x
Crexendo	2.7x	5.4x
RingCentral	7.8x	21.9x
Twilio	9.1x	28.0x
Vonage	4.2x	2.8x
Ziff Davis	3.4x	4.4x

EBITDA Multiple Trends



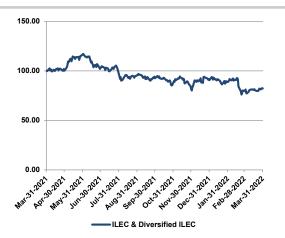
Company EBITDA Multiples

	3/31/2022	3/31/2021
Hosted & Managed Services Index	NM	278.5x
8x8	NM	NM
American Virtual Cloud Tech.	NM	NM
Bandwidth	29.9x	156.3x
Crexendo	NM	77.5x
RingCentral	NM	NM
Twilio	NM	NM
Vonage	51.5x	30.6x
Ziff Davis	10.5x	11.2x



Sub Sector Analysis: ILEC & Diversified ILEC

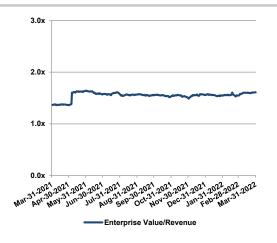
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
ILEC & Diversified ILEC Index	-17.8%	-10.3%
Consolidated Communications	-18.1%	-21.1%
Telephone & Data Systems	-17.8%	-6.3%

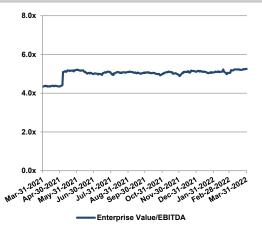
Revenue Multiple Trends



Company Revenue Multiples

	3/31/2022	3/31/2021
ILEC & Diversified ILEC Index	1.6x	1.4x
Consolidated Communications	2.3x	1.9x
Telephone & Data Systems	1.4x	1.2x

EBITDA Multiple Trends



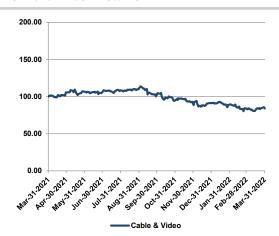
Company EBITDA Multiples

	3/31/2022	3/31/2021
ILEC & Diversified ILEC Index	5.3x	4.4x
Consolidated Communications	6.5x	5.2x
Telephone & Data Systems	6.5x	5.3x



Sub Sector Analysis: Cable & Video

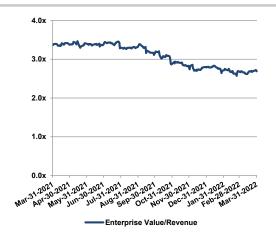
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Cable & Video Index	-16.0%	-7.6%
Altice	-61.6%	-22.9%
Cable One	-19.9%	-17.0%
Charter Communications	-11.6%	-16.3%
Comcast	-13.5%	-7.0%
Dish Network	-12.6%	-2.4%
WOW	28.3%	-19.0%

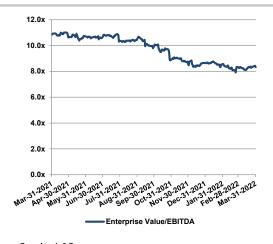
Revenue Multiple Trends



Company Revenue Multiples

	3/31/2022	3/31/2021
Cable & Video Index	2.7x	3.4x
Altice	3.2x	4.3x
Cable One	7.8x	9.5x
Charter Communications	3.9x	4.3x
Comcast	2.7x	3.4x
Dish Network	1.9x	1.9x
WOW	2.9x	3.0x

EBITDA Multiple Trends



Company EBITDA Multiples

	3/31/2022	3/31/2021
Cable & Video Index	8.3x	10.8x
Altice	7.5x	9.8x
Cable One	15.3x	19.0x
Charter Communications	9.8x	11.2x
Comcast	9.0x	11.4x
Dish Network	8.8x	7.8x
WOW	12.1x	8.6x



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Rich Pierce has 20 years of investment banking experience advising

middle market clients on a variety of mergers and acquisitions and capital raising transactions. During that time, Mr. Pierce's primary emphasis has been on serving clients in the telecommunications industry including providers of network related hardware and software products, wireless and wireline telecommunications service providers and network engineering and construction companies.



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David Freeland, a FOCUS Managing Director, has more than fifteen years of experience providing invest-

ment banking and management consulting services to a variety of corporate clients, ranging from the Fortune 500 to start-up businesses. He has been an investment banker since 2003, advising clients on mergers and acquisitions and capital raising transactions. Mr. Freeland has broad experience in the telecom and technology industry and has significant experience with data center companies.

About FOCUS Investment Banking LLC

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