



FOCUS Telecom Technology and Services Group Telecom Business Services Quarterly

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FOCUS

Strategic, Personal, Dedicated

Investment Banking

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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Telecom Business Services Quarterly

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

FOCUS believes that the Telecom Business Services sector is an attractive (and often overlooked) segment of the telecom market. The companies in this sector perform services such as distributing communications-related products, designing and installing communications infrastructure and providing repair and other logistics services for both communications service providers and businesses. These companies often benefit from the same exciting trends that drive growth in the larger telecommunications industry.

However, as professional services businesses they tend to be much less capital-intensive than network-based telecommunications service providers. Furthermore, they typically face little threat from shifts in technology. In fact, more often than not they benefit from technology shifts as upgrade cycles drive client demand for their services and expertise. FOCUS is proud of its commitment to the Telecom Business Services sector and we are excited about the prospects for companies in this space.

The FOCUS Telecom Technology and Services group consists of four professionals with a mix of backgrounds that include both C-level operating expertise and experience at leading middle market investment banks. 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 bankers with C-level operating experience in the telecom industry,
- 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

Distributors and Logistics Services: This sector includes companies that distribute communications-related products or that provide repair, refurbish and other supply chain management solutions. Companies in this segment may serve either telecom service providers, businesses or both.

Engineering and Construction: Engineering and Construction companies provide a variety of services including network planning and design, systems integration, installation and construction. Customers are primarily service providers but may also include large enterprises and governments.

Summary Comments

Public Markets

The FOCUS Telecom Business Services Index (TBSI) continued its upward march with a gain of 1.6% for our fall reporting period. However, unlike in the summer period, this gain underperformed both the 4.0% gain in the S&P 500 and the 5.8% gain in the NASDAQ over the corresponding time period. Even with this period's underperformance, the sector continues to outperform the broader indices for the full 12-month period. The TBSI's 12-month gain of 24.4% compares favorably to both the 16.2% gain in the S&P 500 and the 22.3% gain in the NASDAQ. It also is worth noting that the sector's strong year-over-year increases are the result of improvements in financial performance rather than multiple expansion, and in fact multiples have remained fairly steady compared to this same time last year. The sector revenue multiple held steady at 0.4x, while the sector EBITDA multiple ticked up slightly from 8.5x to 8.8x.

Distributors and Logistics Services

Gains in the Distributors and Logistics Services sub sector moderated somewhat over this most recent three months, but the sub sector remained in the black with a solid 2.9% gain. However, only three of the eight companies in the sub sector turned in a positive performance for the period. These companies were CDW (up 14.4%), ePlus (up 36.9%), and Insight (up 11.8%). The remaining five stocks in the sub sector all posted losses, including double

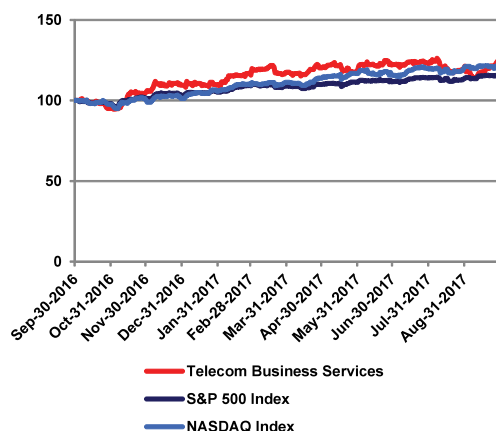
digit declines at ADDvantage Technologies, Black Box, and TESSCO. Full-year performance for the Distributors and Logistics Services sub sector remains very strong with a year-over-year increase of 33.5%. Once again, the combination of CDW, ePlus, and Insight were the main drivers of growth. Sub sector multiples also are higher than they were for the year-ago period. The sub sector revenue multiple expanded from 0.3x to 0.4x, while the sub sector EBITDA multiple jumped from 9.4x to 11.2x.

Engineering and Construction

The Engineering and Construction sub sector was in the red by the slimmest of margins this period, dropping 0.1% in the past three months. This was despite the fact that six of the eight stocks in the sub sector were in positive territory for the period. However, this was not enough to counterbalance the 4.1% drop at Dycom and the 10.7% drop at China Communications Services, two of the sub sector's larger market cap stocks. For the full year, the sub sector gained 14.4%. While a number of small cap stocks had higher returns, the 56.0% gain at large cap stock Mastec over the past 12 months was the engine that drove the sub sector's gains. Multiple performance for the Engineering and Construction sub sector was mixed. The sub sector revenue multiple increased from 0.4x a year ago to 0.5x currently. However, the sub sector EBITDA multiple declined from 7.5x to 6.4x over the same time frame.

Telecom Business Services: Public Market Summary

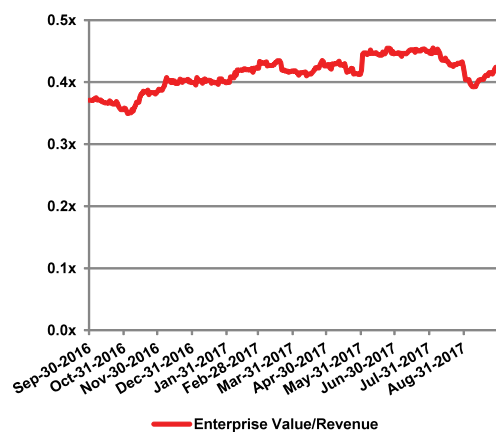
Twelve Month Index Returns



Sector and Sub Sector Returns

	12 Month	3 Month
Telecom Business Services	24.4%	1.6%
Distributors and Logistics Services	33.5%	2.9%
Engineering and Construction	14.4%	-0.1%
S&P 500	16.2%	4.0%
NASDAQ	22.3%	5.8%

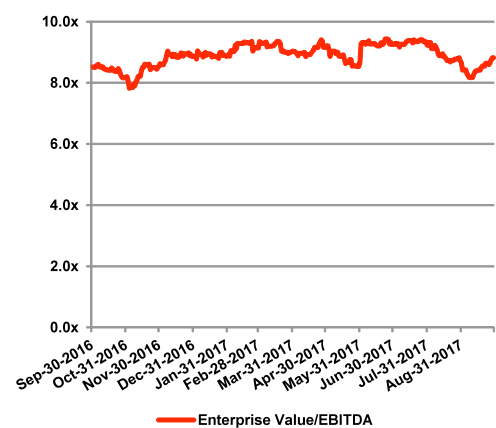
Revenue Multiple Trends



Sector and Sub Sector Revenue Multiples

	9/30/2017	9/30/2016
Telecom Business Services	0.4x	0.4x
Distributors and Logistics Services	0.4x	0.3x
Engineering and Construction	0.5x	0.4x

EBITDA Multiple Trends



Sector and Sub Sector EBITDA Multiples

	9/30/2017	9/30/2016
Telecom Business Services	8.8x	8.5x
Distributors and Logistics Services	11.2x	9.4x
Engineering and Construction	6.4x	7.5x

Source: Capital IQ

Summary Comments

M&A

This period the Telecom Business Services sector had 38 transactions with a total announced transaction dollar volume of \$567 million. The number of transactions this period was consistent with what we have seen in our previous two reporting periods for 2017, while announced transaction dollar volume was lower than our most recent summer reporting period, but above the levels we saw in the spring. For the full year, we count 112 total transactions in the sector with a total announced transaction dollar volume of roughly \$1.9 million. Both figures are running behind the levels we have seen in the past two years, but still represent a reasonably strong level of activity.

Distributors and Logistics Services

Activity in the Distributors and Logistics Services sub sector picked up again with 27 transactions for the period. The “Distributors” portion of the sub sector was very active with a number of large transactions. The Sirius Computer Solutions acquisition of Forsythe Technology was particularly notable, and while Sirius did not announce a price, we do know Forsythe Technology had more than \$1 billion in annual revenue. In another large transaction without an announced purchase price, ConvergeOne acquired unified communications integrator Strategic Products and Services. Finally, Grupo Cimcorp acquired Getronics for \$250 million. In addition to the distributors, the “Logistics Services” portion of the sub sector also was active. Most notable was the acquisition of refurbished equipment company Atlantix Global Systems by Cxtec, an H.I.G Capital portfolio company. In addition, Park Place Technologies was extremely active this period as it closed on three acquisitions of third party data center maintenance service

providers.

Engineering and Construction

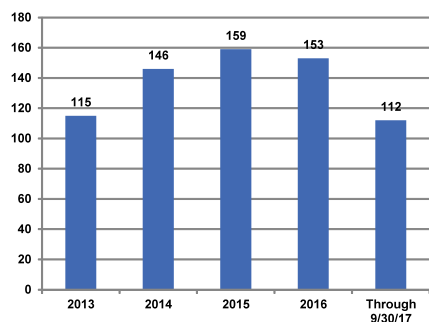
Activity in the Engineering and Construction sub sector remained robust with 11 total transactions in the past three months. Two companies, UniTek Global Services and Quanta Services, announced their return to the fiber construction business this period with acquisitions of GW Solutions and Sirah Contracting, respectively. Both UniTek and Quanta previously had divested their fiber businesses, and these acquisitions punctuate their return to the market. We also saw private equity-backed companies in the U.S. drive significant deal volume as Squan (with its acquisition of Communication Specialists), Tower Engineering Professionals (with its acquisition of Egan Realty Services), ETAK (with its acquisition of an unnamed tower construction company in Ohio), and Peak Utility Services Group (with its acquisition of Kelly Cable) all notched transactions this reporting period.

Transactions with Multiples

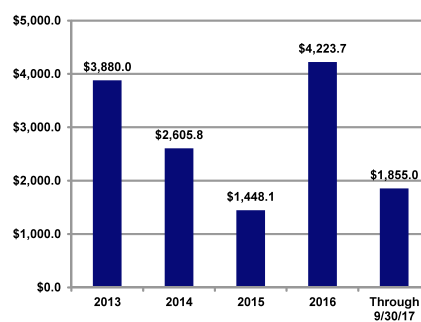
Once again, we had a reporting period with three transactions with announced multiples. The two transactions with multiples in the Distributors and Logistics Services sub sector were the acquisition of Getronics by Grupo Cimcorp and the acquisition of BKE TeleCom by Techstep. Both transactions had identical revenue multiples of 0.5x. In addition, the TechStep/BKE TeleCom deal had an announced EBITDA multiple of 6.6x. In the lone Engineering and Construction sub sector transaction with a multiple, ZTE acquired Turkish telecom systems integration company Netas Telecommunications for 1.1x revenue and 19.0x EBITDA.

Telecom Business Services: M&A Summary

M&A Activity: Number of Transactions



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



Announced Transactions (7/1/17 – 9/30/17)

Acquiror	Target	Sector	Date Announced	Purchase Price	Description
Sirius Computer Solutions	Forsythe Technology	Distributors & Logistics Services	9/28/17	NA	Consulting and professional services, security, hosting and technology solutions for organizations.
Tower Engineering Professionals	Egan Realty Services	Telecom Engineering and Construction	9/26/17	NA	Site acquisition services for carriers and tower owners including small cell and in-building site acquisition services.
acmeo	net-point ag	Distributors & Logistics Services	9/21/17	NA	Specialist distributor for solutions in the field of VoIP, IT security, managed services and backup.
Clarus Communications	Innovative Telecom Consultants	Distributors & Logistics Services	9/21/17	NA	Provides enterprise telephony integration and consulting services for businesses in the Kansas City area.
Rock Networks	Nova Communications	Telecom Engineering and Construction	9/18/17	NA	Provides network engineering, telecommunications construction and systems integration services in Eastern Canada.
ePlus	Integrated Data Storage	Distributors & Logistics Services	9/15/17	NA	Provides data center storage systems and IT systems integration and technology consulting services.
Presidio	Emergent Networks	Distributors & Logistics Services	9/11/17	NA	Full-service technology consulting company that offers clients complete IT strategy, solutions and support.
Avedon Capital Partners	Viju Norge	Distributors & Logistics Services	9/9/17	NA	Provides videoconferencing and collaboration software as well as integration and support services.
Avedon Capital Partners	VisonsConnected	Distributors & Logistics Services	9/9/17	NA	Provides videoconferencing and collaboration software and related managed messaging services for businesses globally.
Unitek Global Services	GW Communications	Telecom Engineering and Construction	9/6/17	NA	Communications infrastructure services firm providing engineering, construction, equipment installation and maintenance services.
Ntiva	IN Communications	Distributors & Logistics Services	9/5/17	NA	Provides telecom systems integration services to small to medium-sized businesses in the Washington, D.C. region.
Solar Communications	TWL Voice and Data	Distributors & Logistics Services	9/5/17	NA	Telephone systems, voice and data cabling, call recording and other solutions to companies in the UK.
Congruity360	NextGen Storage	Distributors & Logistics Services	8/29/17	NA	Provides hybrid cloud consulting and vendor sourcing services.
Esas Group	Technical Services Belgium	Distributors & Logistics Services	8/24/17	NA	Provides installation services for telecom operators.
Cxtec	Atlantix Global Systems	Distributors & Logistics Services	8/22/17	NA	Reseller of new, reconfigured and refurbished IT equipment
Rejlers	Infrakonsult Syd	Telecom Engineering and Construction	8/21/17	NA	Provides fiber network design, consulting and documentation services for operators.
ConvergeOne	Strategic Products and Services	Distributors & Logistics Services	8/17/17	NA	Multi-vendor system integrator for unified communication and collaboration solutions.
Fidelus Technologies	Something Digital (Networking And Security Services Group)	Distributors & Logistics Services	8/15/17	NA	Provides clients with IT networking and security solutions.
Park Place Technologies	NCE Group	Distributors & Logistics Services	8/8/17	NA	Global provider of third-party data center maintenance and repair services
Quanta Services	Sirah Contracting	Telecom Engineering and Construction	8/8/17	NA	Telecom construction services including conduit installation and proofing, cable extraction and fiber optic cable placement.
Park Place Technologies	Allen Myland	Distributors & Logistics Services	8/2/17	NA	Provides Dell EMC and Hitachi data storage maintenance and hardware support services.
Macnica Networks	Netpoleon Solutions	Distributors & Logistics Services	8/1/17	NA	Designs, deploys, and maintains network and security solutions.
Maintel Europe	Intrinsic Technology	Distributors & Logistics Services	8/1/17	\$6.9	Designs, installs and maintains converged communications networks for UK-based enterprises.
Westshore Companies	PCTEL (Network Engineering Services Business)	Telecom Engineering and Construction	8/1/17	NA	RF engineering company engaged in the design, optimization and testing of wireless communication networks.
ZTE	Netas Telecommunications	Telecom Engineering and Construction	7/28/17	\$294.1	Systems integration and technology services for telecom operators in Turkey.
ConvergeOne	Annese & Associates	Distributors & Logistics Services	7/18/17	NA	Cisco Gold certified partner based in New York.
Park Place Technologies	Performance Data	Distributors & Logistics Services	7/18/17	NA	Global IT service provider for hardware maintenance and systems integration services.
Squan	Communications Specialists	Telecom Engineering and Construction	7/18/17	NA	Aerial and underground fiber construction services for the telecommunications and cable TV industries.
Ansys	Profittek Industrial Communications	Distributors & Logistics Services	7/14/17	\$3.8	Distributes industrial communication products such as industrial ethernet, wireless LAN, VoIP and IP cameras.
Trends ICT Groep	Citocom	Distributors & Logistics Services	7/13/17	NA	Supplies, installs and maintains communications solutions in the Netherlands.
ALEF Distribution	Likeit Solution	Distributors & Logistics Services	7/11/17	NA	Distributes communications and information technology software solutions in Romania.

Announced Transactions (7/1/17 – 9/30/17) continued

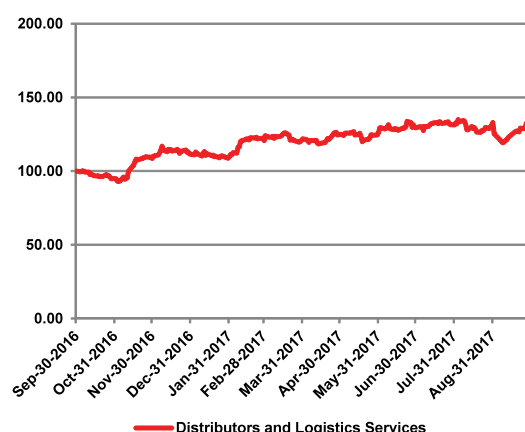
Acquiror	Target	Sector	Date Announced	Purchase Price	Description
Nuvias Group	Data Communication Businesses	Distributors & Logistics Services	7/11/17	NA	Distributes network security hardware, software and services solutions.
ETAK	Unknown	Telecom Engineering and Construction	7/10/17	NA	Provider of wireless tower construction and site acquisition engineering services.
Exclusive Group	Fine Tec	Distributors & Logistics Services	7/6/17	NA	Value added distributor for network security and data integrity.
Grupo Cimcorp	Getronics	Distributors & Logistics Services	7/6/17	\$249.8	Provides Microsoft and Cisco-based network integration and related managed network services for businesses globally.
Neutral Connect Networks	5 Bars	Telecom Engineering and Construction	7/6/17	NA	Develops distributed antenna systems and Wi-Fi systems for venues, stadiums, and properties.
Peak Utility Services Group	Kelly Cable	Telecom Engineering and Construction	7/5/17	NA	Repair, maintenance, upgrade and installation services for telecom and electric power infrastructure in New Mexico.
Techstep	BKE TeleCom	Distributors & Logistics Services	7/3/17	\$12.0	Distributes telecommunication equipment including hardware communication equipment and cloud PBXs.

Announced Transactions with Revenue Multiples (10/1/16 – 9/30/17)

Acquiror	Target	Sector	Date Announced	Purchase Price	Revenue Multiple	EBITDA Multiple	Description
ZTE	Netas Telecommunications	Telecom Engineering and Construction	7/28/17	\$294.1	1.1 x	19.0 x	Systems integration and technology services for telecom operators in Turkey.
Grupo Cimcorp	Getronics	Distributors & Logistics Services	7/6/17	\$249.8	0.5 x	NA	Provides Microsoft and Cisco-based network integration and related managed network services for businesses globally.
Techstep	BKE TeleCom	Distributors & Logistics Services	7/3/17	\$12.0	0.5 x	6.6 x	Distributes telecommunication equipment including hardware communication equipment and cloud PBXs.
TalkPool	LCC (Pakistan Operations)	Telecom Engineering and Construction	6/26/17	\$5.2	0.4 x	NA	Provides wireless network design, site construction, integration, testing and maintenance services for the telecom industry worldwide.
Credence Security	Intact Software Distribution	Distributors & Logistics Services	6/16/17	\$0.3	0.5 x	13.6 x	Distributes cyber security software and solutions in South Africa.
Synnex	Westcon Group (North America and Latin America)	Distributors & Logistics Services	6/6/17	\$915.0	0.4 x	10.3 x	Technology distributor that provides security, collaboration, networking and data center products.
Credence Security	A-tek Distribution	Distributors & Logistics Services	1/24/17	\$0.3	0.3 x	0.6 x	Distributes cyber security solutions from vendors such as AVG and F-Secure.
ERF Wireless	Accordant Communications	Telecom Engineering and Construction	1/19/17	\$14.0	2.8 x	NA	Broadband network developer and builder with five offices in the U.S.
Daisy Group	Alternative Networks	Distributors & Logistics Services	12/23/16	\$229.8	1.3 x	11.1 x	Communications network consulting, systems integration and equipment and device distribution for businesses.
Wentronic	Cellnet Group	Distributors & Logistics Services	11/11/16	\$10.5	0.2 x	6.3 x	Distributes mobile phones and tablets and provides fulfillment services to the mobile telecommunications and retail industries.
C5 Capital	ITC Global Security	Distributors & Logistics Services	11/8/16	\$29.8	1.7 x	NA	Information security and networking consultancy providing integration and managed services in Europe, Asia-Pacific and North America.
Insight Enterprises	Datalink	Distributors & Logistics Services	11/7/16	\$222.8	0.3 x	10.6 x	Data center services and solutions including design, deployment, management and support services.
ADDvantage Technologies	Triton Datacom	Distributors & Logistics Services	10/19/16	\$10.0	0.7 x	4.8 x	Distributes new and refurbished Cisco networking products and equipment with an emphasis on VoIP and IP telephony.
DCC	Hammer Consolidated Holdings	Distributors & Logistics Services	10/14/16	\$46.7	0.2 x	NA	Distributes server and storage products.

Sub Sector Analysis: Distributors and Logistics Services

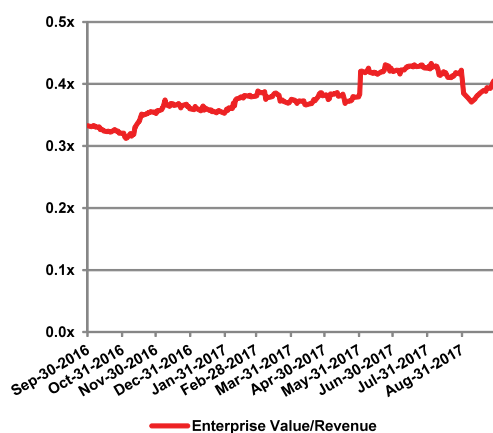
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Distributors & Logistics Index	33.5%	2.9%
ADDvantage Technologies	-21.1%	-27.6%
Black Box	-76.6%	-63.7%
CDW	44.3%	14.4%
ePlus	95.8%	36.9%
Insight	41.1%	11.8%
PC Connection	6.7%	-5.4%
Tech Data	4.9%	-5.4%
Tessco	0.3%	-20.7%

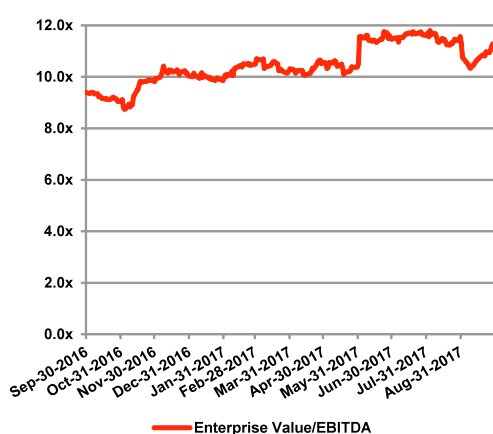
Revenue Multiple Trends



Company Revenue Multiples

	9/30/2017	9/30/2016
Distributors & Logistics Index	0.4x	0.3x
ADDvantage Technologies	0.4x	0.4x
Black Box	0.2x	0.3x
CDW	1.0x	0.8x
ePlus	1.0x	0.6x
Insight	0.3x	0.2x
PC Connection	0.3x	0.2x
Tech Data	0.2x	0.1x
Tessco	0.2x	0.2x

EBITDA Multiple Trends



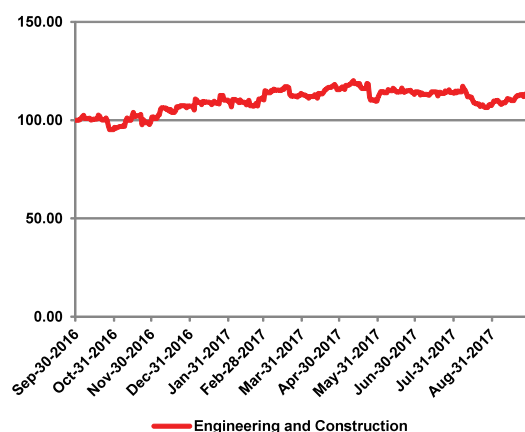
Company EBITDA Multiples

	9/30/2017	9/30/2016
Distributors & Logistics Index	11.2x	9.4x
ADDvantage Technologies	7.7x	5.3x
Black Box	7.0x	7.5x
CDW	12.8x	10.4x
ePlus	13.7x	8.5x
Insight	8.7x	6.7x
PC Connection	8.1x	7.2x
Tech Data	9.3x	7.4x
Tessco	15.7x	12.6x

Source: Capital IQ

Sub Sector Analysis: Engineering and Construction

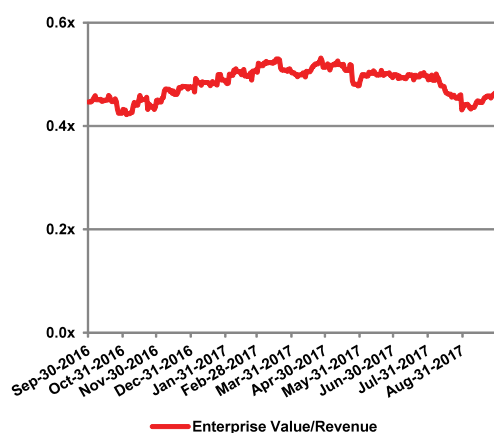
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Engineering & Construction Index	14.4%	-0.1%
Baran Group	0.0%	5.4%
China Communications Services	-17.7%	-10.7%
COMSYS Holdings	35.3%	16.0%
Dycom	5.0%	-4.1%
Mastec	56.0%	2.8%
MIRAIT Holdings	41.8%	7.0%
TSS	261.4%	92.7%
WPCS	34.5%	25.9%

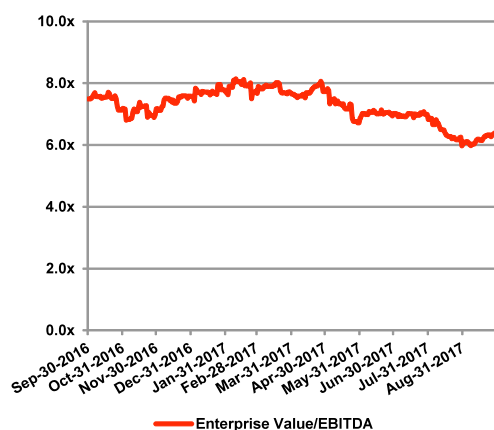
Revenue Multiple Trends



Company Revenue Multiples

	9/30/2017	9/30/2016
Engineering & Construction Index	0.5x	0.4x
Baran Group	0.2x	0.2x
China Communications Services	0.1x	0.2x
COMSYS Holdings	0.7x	0.5x
Dycom	1.1x	1.2x
Mastec	0.9x	0.7x
MIRAIT Holdings	0.3x	0.2x
TSS	0.2x	0.1x
WPCS	0.3x	0.2x

EBITDA Multiple Trends



Company EBITDA Multiples

	9/30/2017	9/30/2016
Engineering & Construction Index	6.4x	7.5x
Baran Group	NM	NM
China Communications Services	2.9x	5.2x
COMSYS Holdings	6.7x	5.2x
Dycom	8.0x	8.7x
Mastec	8.7x	9.3x
MIRAIT Holdings	5.1x	4.3x
TSS	22.4x	NM
WPCS	NM	NM

Source: Capital IQ

FOCUS Telecom Technology and Services Team



Richard H. Pierce

Managing Director and Telecom Technology and Services Team Leader, Washington, DC

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Rich Pierce has more than ten 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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John Bradshaw has over 30 years experience in sales, marketing, manufacturing, finance, and systems engineering with corporations specializing in technology-driven business products and services. Mr. Bradshaw has been a successful senior executive and manager in both large and small organizations, and has spent the last 15 years working with entrepreneurial companies. Mr. Bradshaw has particular expertise in enterprise communications and contact center related technology.



David Freeland

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David Freeland, a FOCUS Principal, has more than fifteen years of experience providing investment 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.



Eric M. Oganessoff

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Eric Oganessoff has conducted over forty M&A, debt, and capital raise transactions with an aggregate value of over \$300 million and has served as the CEO or President of several companies. Mr. Oganessoff has over twenty years of senior executive level experience in leading businesses ranging from wireless solutions, software, and RFID services to manufacturing, industrial products, energy, and environmental products and government contracting.

About FOCUS Investment Banking LLC

FOCUS Investment Banking LLC provides a range of middle market investment banking services with an emphasis on mergers, acquisitions, divestitures and corporate finance. FOCUS is a national firm serving clients from offices in major cities across the United States. FOCUS specializes in business units with transactions or revenues in the \$5-300 million range, serving entrepreneurs, corporate owners and various types of investors across a broad range of industries, throughout the U.S. and worldwide. FOCUS bankers are seasoned operating and financial executives with extensive transaction experience. Securities transactions conducted by FOCUS Securities LLC, an affiliated company, registered Broker/Dealer and member FINRA/SIPC. For more information on FOCUS, visit www.focusbankers.com.

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