

FOCUS Telecom
Technology and Services Group
Carrier-Focused
Telecom Technology
Quarterly

Winter 2015 Report

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FOCUS

Investment Banking

Seasoned, Systematic, SuccessfulSM

Investment Banking and Advisory Services

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

Sellside Assignments
Buyside Engagements
Capital Formation
Valuation and Fairness Options

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Carrier-Focused Telecom Technology Quarterly

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

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.

In 2015, members of the FOCUS Telecom team will be attending many conferences and meetings throughout the U.S. and are always delighted to receive introductions to

innovative companies in the industry. We hope to see you at one of these events, and look forward to exploring your capital market needs as you continue to grow your enterprise.

Sub Sector Definitions

- **Large Cap:** Large, diversified companies with products across a variety of sub sectors
- **OSS/BSS Software:** Software systems that manage and bill the customer base and monitor and maintain telecom networks
- **IP Networking:** Carrier Ethernet switching, routers and IP Multimedia Subsystem (“IMS”) components
- **Wireline Access and Transport:** DSL equipment, PON equipment and WDM-based transport
- **Cable and Video:** Products such as headends and servers that support video delivery as well as broadband products for cable networks
- **Broadband Wireless:** High capacity, fixed wireless equipment
- **Test and Measurement:** Equipment used by both service providers and manufacturers to test and monitor networks and equipment

Summary Comments

Public Markets

On the surface at least it was a good three-month period for FOCUS' Carrier-Focused Telecom Technology Index (CFTTI). The CFTTI was up 4.3% this period, handily beating the 3.2% gain in the S&P 500 and more or less keeping pace with the 4.6% gain in the NASDAQ. However, gains were not broad-based, with only the Large Cap sub sector in positive territory for the period. For the 12-month period, the CFTTI is up 13.0%. This trails both the 14.5% gain in the S&P 500 and the 18.0% gain in the NASDAQ. CFTTI multiples ended the period at 1.5x revenue and 9.3x EBITDA. These multiples are higher than both our Fall report and what we saw in the year-ago period.

Large Cap

The Large Cap sub sector made a triumphant return to the position of best performing sub sector with a gain of 6.3% for the period. This handily beat the other sub sectors and also outperformed both the S&P 500 and the NASDAQ. The main drivers were Cisco (up 10.6% for the period) and ZTE (up 12.4% for the period). Alcatel-Lucent also posted a gain of 2.9% as the market responded positively to the company's turnaround efforts. On the down side, Juniper lost 4.4% in the wake of the resignation of its CEO. For the year, the Large Cap sub sector is up 16.1%. This makes it the second best performing sub sector for the 12-month period. Over the past year, the sub sector revenue multiple expanded from 1.1x to 1.5x, while the sub sector EBITDA multiple increased from 7.3x to 8.9x.

OSS/BSS/Software

After two straight periods of gains, the OSS/BSS Software sub sector had a downward turn and posted a 2.0% loss for our Winter reporting period. Eight of the 13 companies in the index were in negative territory, so losses were broad-based. The biggest drags on the sub sector were Comverse and NetScout. Comverse declined more than 18% after a disappointing earnings release, while NetScout declined more than 17% due to market jitters about its impending merger with the communications division of Danaher. The picture is rosier for the full year, with the OSS/BSS sub sector up nearly 12%. Sub sector multiples have remained fairly steady compared to the year-ago period. The sub sector revenue multiple increased slightly from 1.7x to 1.8x, while the sub sector EBITDA multiple grew from 10.5x to 10.9x.

IP Networking

The IP Networking sub sector continued to struggle to gain sustainable momentum. The sub sector's loss of 7.7% for the period once again meant it failed to string together two straight reporting periods of gains, and seven of the nine stocks in the sub sector showed losses in this past three months. The DPI companies Allot, Procera, and Sandvine were particularly hard hit, with losses ranging from roughly 13% to more than 30%. The only bright spots were Broadsoft and Mavenir Systems, each of which was up more than 10%. For the 12-month period, the IP Networking sub sector moved deeper into negative territory, and its full year loss now stands at 4.7%. The sub sector revenue multiple is now 2.1x, and IP Networking is in danger of giving up its longstanding position as the highest revenue multiple sub sector in the CFTTI. The sub sector EBITDA multiple of 77.8x is still high, but also implies that as a whole, the sub sector has very low EBITDA margins. This inability to generate cash flow is a chief reason for the sub sector's struggles.

Wireline Access and Transport

The Wireline Access and Transport sub sector did not fare much better than the IP Networking sub sector, dropping 5.1% for the three-month period. A number of vendors suffered losses of more than 20% for the period including CIENA, Cyan, MRV Communications, and Zhone Technologies. One company that bucked the trend was Infinera, which gained nearly 30% despite steep losses at all of its brethren in the Transport space. The Wireline Access and Transport sub sector has lost 11.3% over the past year, and the sub sector revenue multiple of 1.2x and EBITDA multiple of 25.3x are both lower than what we saw in our year-ago period.

Cable and Video

The Cable and Video sub sector lost 0.9% for the three-month period. While by no means a strong performance, it was still good enough to make it the second best performing sub sector for the period. Amino, Harmonic, and Pace all moved up in this past three months, while the other four companies in the sub sector were all in negative territory. Despite this period's loss, Cable and Video is still the best performing sub sector for the past year with a gain of 17.0%. The sub sector revenue and EBITDA multiples ended the period at 1.0x and 8.5x, respectively.

Broadband Wireless

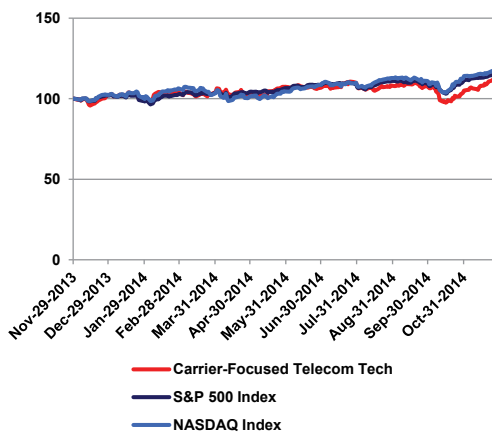
“Ugly” is the word that comes to mind to describe the performance of the Broadband Wireless sub sector for our Winter reporting period. The sub sector was down 36.2% in the past three months, and every single stock was in negative territory. The 3.8% drop at Aviat Networks was actually good enough to make it the sub sector’s best performing company. The full year picture is not much better with the sub sector down almost 30%. The sub sector revenue multiple was 1.8x at the end of the reporting period, while the sub sector EBITDA multiple was 15.1x. Not surprisingly, both multiples are down significantly from this same time last year.

Test and Measurement

The Test and Measurement sub sector dropped 2.2% in this three-month reporting period. There was a glimmer of hope as the sub sector was split equally between gainers and losers. However, steep losses at Anite, Anritsu, EXFO, and Spirent outweighed increases at the other companies in the sub sector. For the full year, the sub sector is down nearly 20%. Multiple performance was mixed. The revenue multiple declined from 1.7x a year ago to 1.4x currently, while the EBITDA multiple went in the opposite direction and grew from 12.5x to 13.1x over the same time-frame.

Carrier-Focused Telecom Technology: Public Market Summary

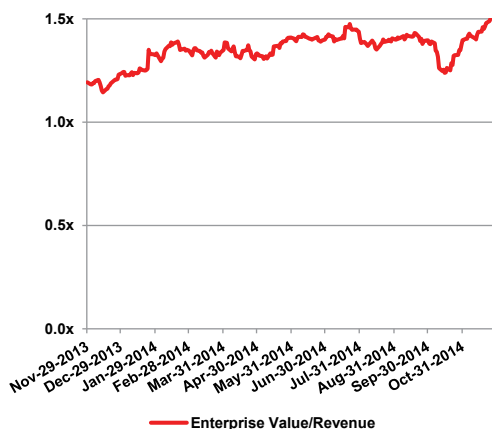
Twelve Month Index Returns



Sector and Sub Sector Returns

	12 Month	3 Month
Carrier-Focused Telecom Tech	13.0%	4.3%
Large Cap	16.1%	6.3%
OSS/BSS	11.8%	-2.0%
IP Networking	-4.7%	-7.7%
Wireline Access and Transport	-11.3%	-5.1%
Cable and Video	17.0%	-0.9%
Broadband Wireless	-28.3%	-36.2%
Test and Measurement	-19.7%	-2.2%
S&P 500	14.5%	3.2%
NASDAQ	18.0%	4.6%

Revenue Multiple Trends



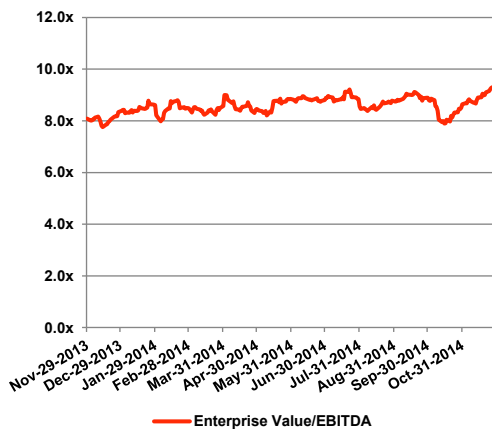
Sector and Sub Sector Revenue Multiples

	11/30/2014	11/30/2013
Carrier-Focused Telecom Tech	1.5x	1.2x
Large Cap	1.5x	1.1x
OSS/BSS	1.8x	1.7x
IP Networking	2.1x	2.4x
Wireline Access and Transport	1.2x	1.4x
Cable and Video	1.0x	1.1x
Broadband Wireless	1.8x	2.7x
Test and Measurement	1.4x	1.7x

Source: Capital IQ

Carrier-Focused Telecom Technology: Public Market Summary (*continued*)

EBITDA Multiple Trends



Source: Capital IQ

Sector and Sub Sector EBITDA Multiples

	11/30/2014	11/30/2013
Carrier-Focused Telecom Tech	9.3x	8.1x
Large Cap	8.9x	7.3x
OSS/BSS	10.9x	10.5x
IP Networking	77.8x	NM
Wireline Access and Transport	25.3x	32.2x
Cable and Video	8.5x	12.7x
Broadband Wireless	15.1x	35.4x
Test and Measurement	13.1x	12.5x

Carrier-Focused Telecom Technology Stocks

M&A

While the public markets picture for the Carrier Focused Telecom Technology sector was challenging for most of the sub sectors we cover, the M&A market continued to be active. We counted 22 transactions for this period for a total of \$2.9 billion in announced transaction dollar volume; a high level of activity by any historical measure. With 11 months of 2014 in the books, it appears the year will be roughly average in terms of the level of M&A activity. The number of announced transactions is on track to be at the top end of what we typically see, but the announced dollar value of transactions is relatively low.

OSS/BSS Software

Activity slowed slightly in the OSS/BSS Software sub sector, but even so we still saw 12 transactions this reporting period. All of these were relatively small. Test and Measurement companies remained active acquirers of OSS/BSS Software companies. Anite acquired wireless optimization software vendor Xceed Technologies for \$35.0 million, while Spirent Communications acquired mobile device analytics company Mobilethink for \$20.0 million. We also noted with interest Constellation Software's purchase of Incognito Software, a provider of provisioning and service activation solutions for communications operators. This was Constellation's inaugural purchase in the OSS/BSS Software sub sector, and given their active history as an acquirer of small software companies, it seems reasonable to assume they will continue to look for opportunities

for add on acquisitions in the space. Finally, we noted with interest switching provider Brocade's acquisition of Vistapointe. Vistapointe provides analytics solutions for mobile network operators and supports Brocade's initiatives in the Network Functions Virtualization (NFV) space.

IP Networking

IP Networking saw three transactions this reporting period. In the largest of these, private equity firm Novacap took struggling Dialogic private for \$36.6 million. We also saw Mavenir Systems purchase Stoke for \$4.8 million. Given that the mobile broadband gateway provider had raised nearly \$100 million in funding, this was clearly a disappointing result. Finally, Kineto Wireless, another company that had attracted substantial venture funding for its voice-over-WiFi solution, was acquired by softswitch vendor Taqua Networks for an undisclosed amount.

Wireline Access and Transport

In the lone transaction in the Wireless Access and Transport sub sector, Comtek acquired optical networking vendor Sorrento Networks. Comtek is an after-market services support company, which indicates Sorrento Networks never got significant traction after it was divested from Zhong Technologies back in 2008.

Cable and Video

The Cable and Video sub sector saw two transactions for the period. In the first of these, Ericsson continued to

build its video capabilities with the acquisition of cloud-based DVR provider Fabrix. In addition, DTS acquired MPEG software vendor Manzanita Systems.

Broadband Wireless

The two transactions in the Broadband Wireless space were Redline Communication's acquisition of the small cell business of Purewave and the acquisition by its management team of Exalt Communications. In what appears to be a recurring theme for this period, Exalt Communications is another venture capital backed entity that seems to have had a disappointing exit.

Test and Measurement

Test and Measurement had the marquee transaction for the period; the \$2.6 billion purchase of Danaher's Communication Test Business by NetScout. This will make

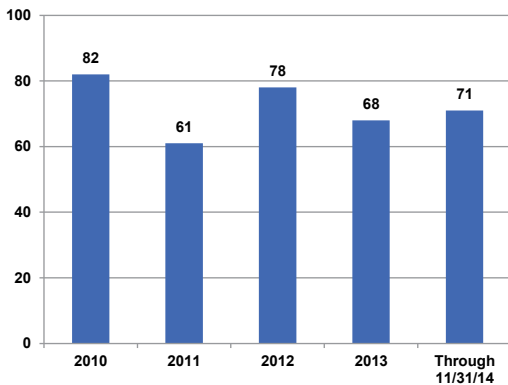
NetScout one of the largest players in the space. In addition, Spirent Communications acquired Netgend, an application performance testing platform.

Transactions with Multiples

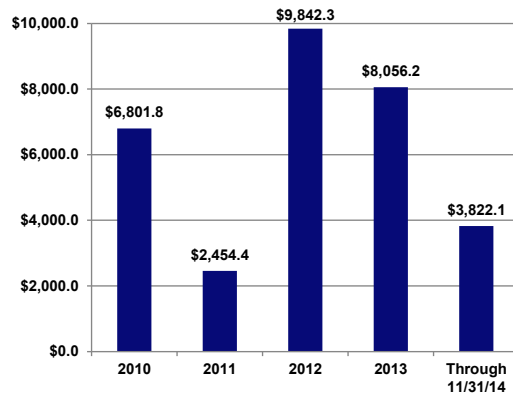
The six transactions with multiples this period covered a wide range of valuations. On the low end, Novacap's acquisition of Dialogic was done at 0.3x revenue and only 3.8x EBITDA, while Mavenir Systems acquired Stoke for 0.6x revenue. In the middle of the range, mobile messaging solution vendor Txtlocal went for 1.8x revenue and Spirent Communications purchased Mobilethink for 2.4x revenue. Finally, the highest multiple transactions were Anite's acquisition of Xceed Technologies (3.0x revenue and 21.9x EBITDA) and NetScout's purchase of the Danaher Communications Test Business (3.3x revenue and 19.4x EBITDA).

Carrier-Focused Telecom Technology: M&A Summary

M&A Activity: Number of Transactions



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



Announced Transactions (9/1/14 – 11/30/14)

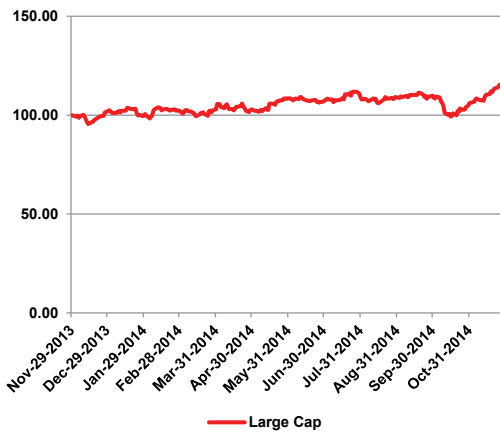
Acquiror	Target	Date Announced	Sector	Purchase Price	Description
Spirent Communications	Netgend	11/13/14	Test and Measurement	\$1.0	Application performance testing platform that provides virtual appliance, cloud testing and documentation products.
Mavenir Systems	Stoke	11/12/14	IP Networking	\$4.8	Mobile LTE security gateway hardware and software systems including Wi-Fi security, authentication and access control.
Beijing Ultrapower Software	Beijing Tianyuan MetarNet Technologies	10/30/14	OSS/BSS Software	\$72.0	Software for communication and computer networks.
Telsis Communications Services	Telsis Group	10/23/14	OSS/BSS Software	NA	Carrier-grade voice, video and messaging solutions.
IIX	Allegro Networks	10/21/14	OSS/BSS Software	NA	Software that enables provisioning of virtual cross connects, point-to-point circuits and peering interconnections.
Invigor Group	Amethon	10/21/14	OSS/BSS Software	\$8.6	Mobile web analytics and content tracking solutions for the mobile telecommunications industry.
StoneCalibre	NetPlus	10/21/14	OSS/BSS Software	NA	Ability to manage cross platform telecom infrastructure including UC, VoIP and legacy technologies.
Management	Exalt Communications	10/14/14	Broadband Wireless	NA	High-value fixed broadband wireless systems that extend or complement network fiber.
Accanto Systems	InstantCEM	10/13/14	OSS/BSS Software	NA	Mobile application enabling device-based customer experience feedback and operator communication in real time.
IMImobile	Txtlocal	10/13/14	OSS/BSS Software	\$21.1	Business mobile messaging services that enable clients to send and receive text messages online.
NetScout Systems	Danaher (Communications Test Business)	10/13/14	Test and Measurement	\$2,619.4	Network test and monitoring, management and security solutions for service providers and enterprises.
Novacap	Dialogic	10/10/14	IP Networking	\$36.6	Products including softswitches, sessions border controllers, media gateways, signaling solutions and media servers.
Boku	mopay	10/7/14	OSS/BSS Software	NA	Payment platform that enables merchants to bill charges directly to consumers' cell phones and landline accounts.
Anite	Xceed Technologies	10/3/14	OSS/BSS Software	\$35.0	Products for wireless network optimization including maps, root cause analysis, benchmarking and RF engineering.
Constellation Software	Incognito Software	9/22/14	OSS/BSS Software	NA	Broadband device provisioning, IP address management, bandwidth monitoring and service activation solutions.
Comtek	Sorrento Networks Corporation	9/18/14	Wireline Access and Transport	NA	DWDM and CWDM optical networking solutions for access, metropolitan and regional applications.
Brocade Communications Systems	Vistapointe	9/15/14	OSS/BSS Software	NA	Mobile analytics and business intelligence solution for 3G and 4G mobile networks.
Spirent Communications	Mobilethink	9/15/14	OSS/BSS Software	\$20.0	Provider of mobile device management, device analytics and intelligence solutions for mobile operators.
Ericsson	Fabrix	9/12/14	Cable and Video	\$95.0	Cloud storage, computing and network delivery for video applications for cable and telecom cloud DVR deployments.
DTS	Manzanita Systems	9/11/14	Cable and Video	NA	MPEG software solutions for the digital television, video on demand and over-the-top markets.
Redline Communications	Purewave (Small Cell Business)	9/9/14	Broadband Wireless	\$1.8	Compact outdoor base stations for the 4G wireless market.
Taqua	Kineto Wireless	9/4/14	IP Networking	NA	Solutions that enable smartphones to deliver voice and messaging services over Wi-Fi networks (voice over Wi-Fi).

Announced Transactions with Revenue Multiples (12/1/13 – 11/30/14)

Acquiror	Target	Date Announced	Sector	Purchase Price	Revenue Multiple	EBITDA Multiple	Description
Mavenir Systems	Stoke	11/12/14	IP Networking	\$4.8	0.6 x	NA	Mobile LTE security gateway hardware and software systems including Wi-fi security, authentication and access control.
IMImobile	Txtlocal	10/13/14	OSS/BSS Software	\$21.1	1.8 x	NA	Business mobile messaging services that enable clients to send and receive text messages online.
NetScout Systems	Danaher (Communications Test Business)	10/13/14	Test and Measurement	\$2,619.4	3.3 x	19.4 x	Network test and monitoring, management and security solutions for service providers and enterprises.
Novacap	Dialogic	10/10/14	IP Networking	\$36.6	0.3 x	3.8 x	Products including softswitches, sessions border controllers, media gateways, signaling solutions and media servers.
Anite	Xceed Technologies	10/3/14	OSS/BSS Software	\$35.0	3.0 x	21.9 x	Products for wireless network optimization including maps, root cause analysis, benchmarking and RF engineering.
Spirent Communications	Mobilethink	9/15/14	OSS/BSS Software	\$20.0	2.4 x	NA	Provider of mobile device management, device analytics and intelligence solutions for mobile operators.
Enghouse Systems	Jinny Software	8/4/14	OSS/BSS Software	\$17.7	0.7 x	NA	Provides mobile messaging and advertising, call completion and voice and value added solutions.
WidePoint	Soft-ex	5/6/14	OSS/BSS Software	\$6.0	1.0 x	14.6 x	Web-based telecom data intelligence and telecom expense management tools for mobile and fixed operators and enterprises.
Synchronoss Technologies	OnMobile (VoxMobili Division)	5/3/14	OSS/BSS Software	\$26.0	1.5 x	NA	Solution for mobile operators that enables subscribers to manage, store and sync address book and link contacts with social networks.
Kudelski	Telereor Broadcast Holding (Conax Division)	3/26/14	Cable and Video	\$249.6	2.4 x	6.2 x	Solutions for securing multi-device and digital TV services for cable, satellite, terrestrial and IPTV operators.
Westell	Cellular Specialties	3/3/14	Broadband Wireless	\$39.0	1.1 x	NA	In-building wireless connectivity products including digital repeaters and modems and distributed antenna system interface units.
Aeroflex	Shenick	2/6/14	Test and Measurement	\$28.5	3.0 x	NA	Per-flow Internet protocol test and measurement solutions for virtualized and physical network infrastructure.
Sonus Networks	Performance Technologies	12/13/13	IP Networking	\$41.5	1.6 x	28.0 x	Diameter and SS7 signaling and multi-protocol gateways and servers.
JDS Uniphase	Network Instruments	12/11/13	Test and Measurement	\$200.0	5.0 x	NA	Network troubleshooting and analysis solutions including packet capture, application management and data collection and analysis.

Sub Sector Analysis: Large Cap

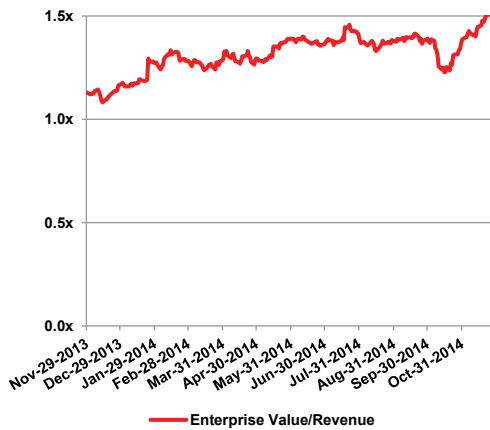
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Large Cap Index	16.1%	6.3%
Aicatel-Lucent	-16.0%	2.9%
Cisco	30.1%	10.6%
Ericsson	0.6%	0.8%
Juniper	9.3%	-4.4%
Nokia	2.6%	-1.0%
ZTE	-4.6%	12.4%

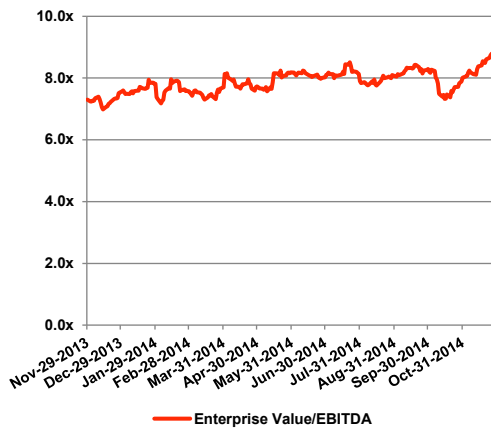
Revenue Multiple Trends



Company Revenue Multiples

	11/30/2014	11/30/2013
Large Cap Index	1.5x	1.1x
Aicatel-Lucent	0.6x	0.6x
Cisco	2.3x	1.7x
Ericsson	1.1x	1.0x
Juniper	1.9x	1.8x
Nokia	1.6x	7.9x
ZTE	0.8x	0.9x

EBITDA Multiple Trends



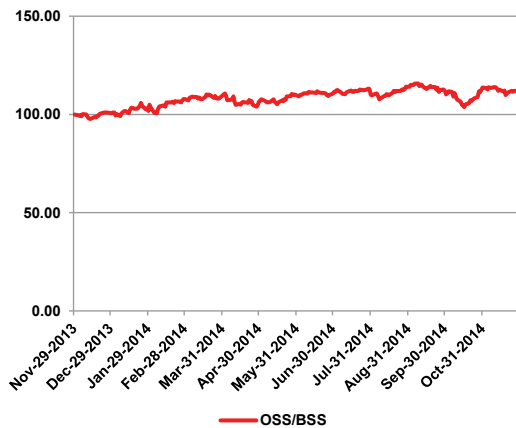
Company EBITDA Multiples

	11/30/2014	11/30/2013
Large Cap Index	8.9x	7.3x
Aicatel-Lucent	9.5x	25.1x
Cisco	8.5x	5.9x
Ericsson	8.1x	8.3x
Juniper	10.4x	11.6x
Nokia	9.4x	5.1x
ZTE	15.8x	31.6x

Source: Capital IQ

Sub Sector Analysis: OSS/BSS Software

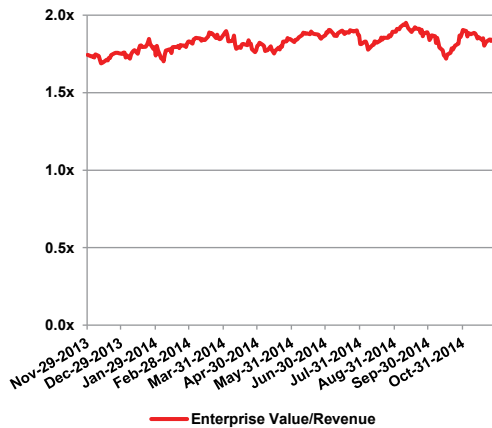
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
OSS/BSS Index	11.8%	-2.0%
Amdocs	20.5%	3.5%
AsialInfo-Linkage	7.8%	-8.2%
Astellia	-19.1%	-12.8%
Comptel	25.6%	-0.1%
Comverse	-40.1%	-18.8%
CSG Systems	-13.0%	-9.4%
Evolving Systems	-2.3%	3.4%
NetScout Systems	25.4%	-17.2%
Radcom	139.3%	89.8%
Redknee	-51.6%	1.2%
Subex	82.7%	53.0%
Synchronoss	35.0%	-3.0%
Tecnotree	-39.6%	-13.9%

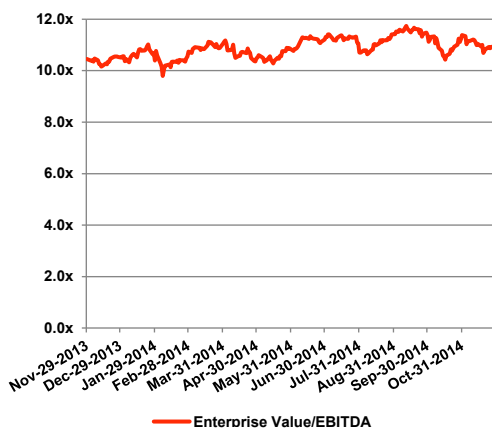
Revenue Multiple Trends



Company Revenue Multiples

	11/30/2014	11/30/2013
OSS/BSS Index	1.8x	1.7x
Amdocs	1.8x	1.6x
AsialInfo-Linkage	4.2x	3.7x
Astellia	0.5x	0.5x
Comptel	0.9x	0.7x
Comverse	0.5x	0.7x
CSG Systems	1.2x	1.4x
Evolving Systems	3.6x	4.0x
NetScout Systems	3.2x	3.1x
Radcom	3.8x	1.8x
Redknee	1.2x	4.3x
Subex	2.6x	2.7x
Synchronoss	4.1x	3.8x
Tecnotree	0.7x	0.7x

EBITDA Multiple Trends



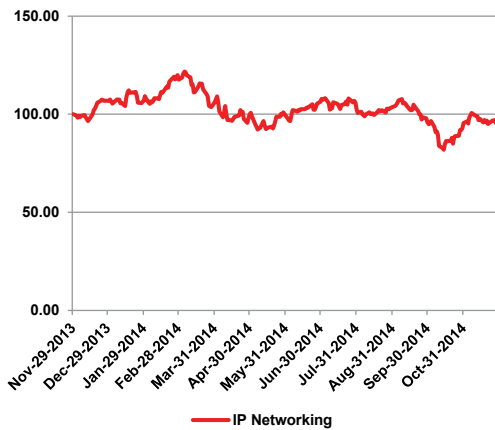
Company EBITDA Multiples

	11/30/2014	11/30/2013
OSS/BSS Index	10.9x	10.5x
Amdocs	9.9x	8.7x
AsialInfo-Linkage	10.8x	11.2x
Astellia	6.7x	30.9x
Comptel	7.5x	7.8x
Comverse	9.3x	6.4x
CSG Systems	7.9x	8.2x
Evolving Systems	13.5x	15.0x
NetScout Systems	13.0x	14.0x
Radcom	58.5x	NM
Redknee	45.0x	234.4x
Subex	15.2x	11.5x
Synchronoss	15.4x	19.1x
Tecnotree	15.0x	NM

Source: Capital IQ

Sub Sector Analysis: IP Networking

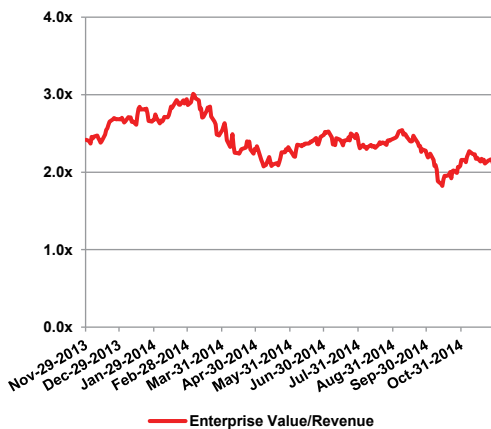
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
IP Networking Index	-4.7%	-7.7%
Allot Communications	-27.5%	-12.7%
Audiocodes	-27.0%	-15.7%
Broadsoft	1.5%	13.0%
Mavenir Systems	19.4%	12.6%
Procera Networks	-55.1%	-33.3%
Radisys	7.6%	-21.8%
Ruckus Wireless	-12.1%	-17.6%
Sandvine	0.9%	-16.7%
SONUS Networks	27.1%	-1.9%

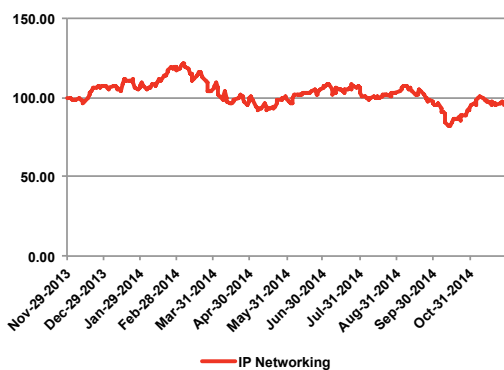
Revenue Multiple Trends



Company Revenue Multiples

	11/30/2014	11/30/2013
IP Networking Index	2.1x	2.4x
Allot Communications	1.7x	3.2x
Audiocodes	1.3x	1.6x
Broadsoft	3.5x	4.0x
Mavenir Systems	2.6x	2.9x
Procera Networks	0.5x	2.9x
Radisys	0.4x	0.3x
Ruckus Wireless	2.5x	3.5x
Sandvine	2.0x	2.5x
SONUS Networks	2.7x	2.2x

EBITDA Multiple Trends



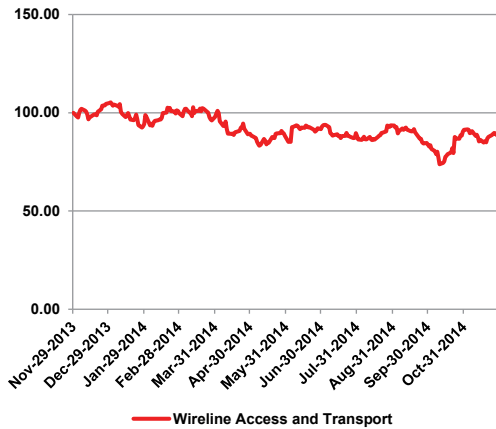
Company EBITDA Multiples

	11/30/2014	11/30/2013
IP Networking Index	77.8x	NM
Allot Communications	30.6x	NM
Audiocodes	30.8x	39.4x
Broadsoft	84.0x	100.8x
Mavenir Systems	NM	NM
Procera Networks	NM	NM
Radisys	NM	NM
Ruckus Wireless	41.4x	84.0x
Sandvine	6.9x	12.8x
SONUS Networks	356.9x	NM

Source: Capital IQ

Sub Sector Analysis: Wireline Access and Transport

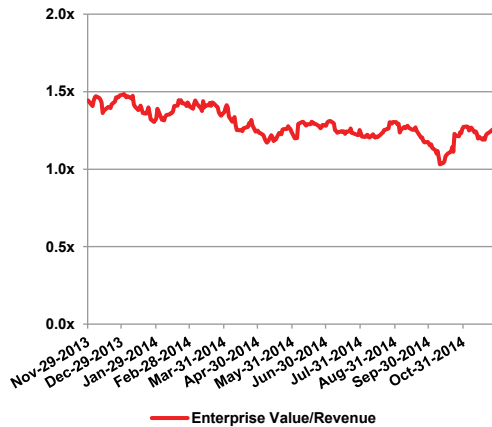
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Wireline Access & Transport Index	-11.3%	-5.1%
ADTRAN	-18.7%	-9.5%
ADVA	-32.1%	-11.7%
BATM	-18.7%	-10.6%
Calix	3.5%	1.0%
CIENA	-25.6%	-20.1%
Communications Systems	-0.1%	1.6%
Cyan	-42.9%	-32.9%
Infinera	46.6%	28.8%
MRV Communications	-17.6%	-26.9%
Net Insight	93.8%	22.4%
Orckit Communications	-89.3%	-43.3%
Transmode Systems	-46.0%	-7.8%
Zhone Technologies	-59.5%	-37.1%

Revenue Multiple Trends



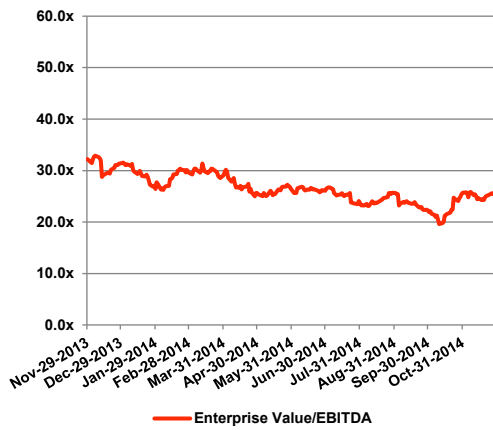
Company Revenue Multiples

	11/30/2014	11/30/2013
Wireline Access & Transport Index	1.2x	1.4x
ADTRAN	1.6x	2.1x
ADVA	0.3x	0.5x
BATM	0.6x	0.7x
Calix	1.2x	1.1x
CIENA	1.1x	1.5x
Communications Systems	0.7x	0.6x
Cyan	1.0x	1.1x
Infinera	2.4x	1.7x
MRV Communications	0.3x	0.4x
Net Insight	2.3x	1.2x
Orckit Communications	2.4x	2.0x
Transmode Systems	1.7x	2.4x
Zhone Technologies	0.5x	1.4x

Source: Capital IQ

Sub Sector Analysis: Wireline Access and Transport *continued*

EBITDA Multiple Trends



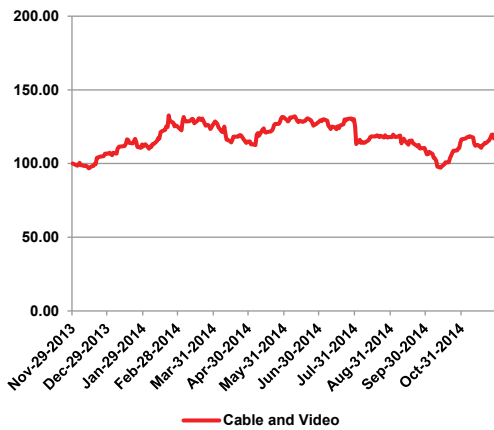
Source: Capital IQ

Company EBITDA Multiples

	11/30/2014	11/30/2013
Wireline Access & Transport Index	25.3x	32.2x
ADTRAN	15.3x	24.1x
ADVA	5.8x	7.5x
BATM	39.2x	46.1x
Calix	210.2x	36.5x
CIENA	15.7x	22.8x
Communications Systems	9.4x	8.8x
Cyan	NM	NM
Infinera	47.6x	NM
MRV Communications	NM	NM
Net Insight	15.1x	63.9x
Orckit Communications	NM	NM
Transmode Systems	19.0x	13.3x
Zhone Technologies	42.4x	38.8x

Sub Sector Analysis: Cable and Video

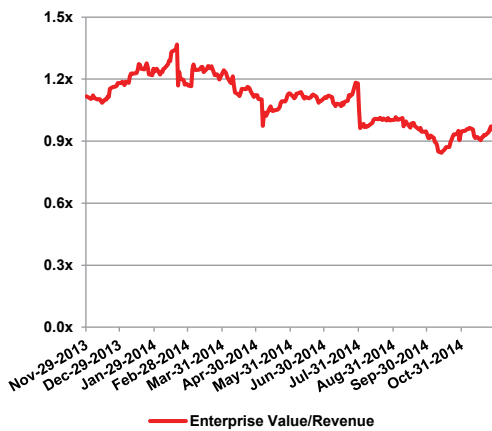
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Cable and Video Index	17.0%	-0.9%
Amino	26.1%	16.9%
Arris	45.1%	-2.7%
Envivio	-45.9%	-11.2%
Harmonic	-9.1%	6.5%
NetGem	-26.6%	-4.5%
Pace	8.8%	2.5%
SeaChange	-54.8%	-11.6%

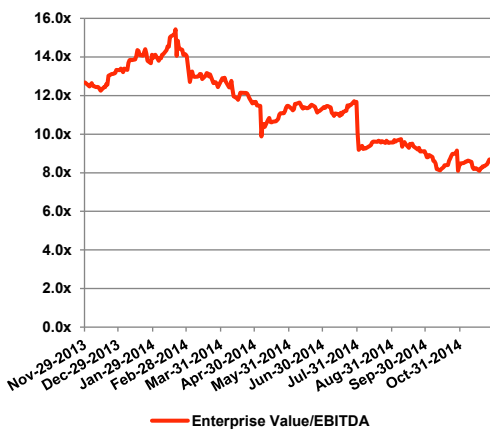
Revenue Multiple Trends



Company Revenue Multiples

	11/30/2014	11/30/2013
Cable and Video Index	1.0x	1.1x
Amino	1.2x	0.8x
Arris	1.0x	1.6x
Envivio	0.0x	0.7x
Harmonic	1.2x	1.3x
NetGem	0.5x	0.8x
Pace	0.8x	0.6x
SeaChange	0.9x	2.4x

EBITDA Multiple Trends



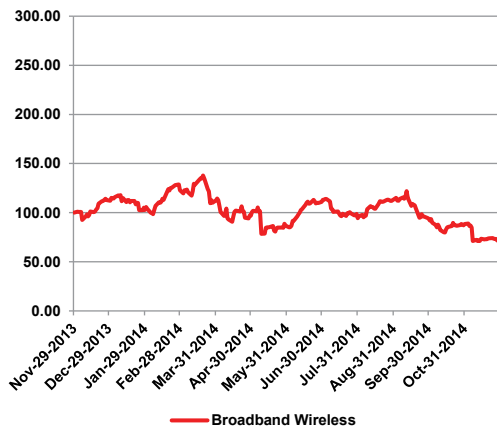
Company EBITDA Multiples

	11/30/2014	11/30/2013
Cable and Video Index	8.5x	12.7x
Amino	6.8x	5.7x
Arris	7.9x	14.7x
Envivio	NM	NM
Harmonic	22.2x	26.7x
NetGem	3.9x	5.1x
Pace	8.2x	7.8x
SeaChange	NM	20.9x

Source: Capital IQ

Sub Sector Analysis: Broadband Wireless

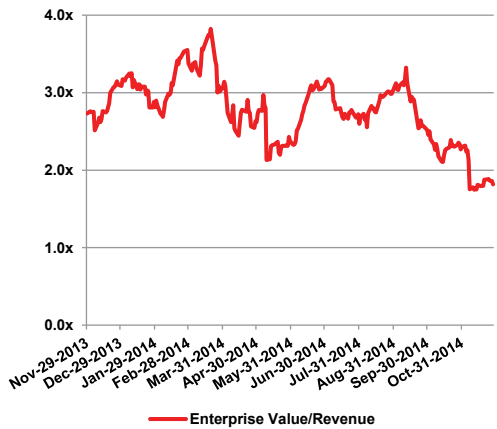
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Broadband Wireless Index	-28.3%	-36.2%
Aviat Networks	-40.3%	-3.8%
Ceragon Networks	-58.8%	-55.9%
DragonWave	-14.0%	-30.7%
Redline Communications	-12.4%	-25.0%
Ubiquiti Networks	-26.6%	-36.3%

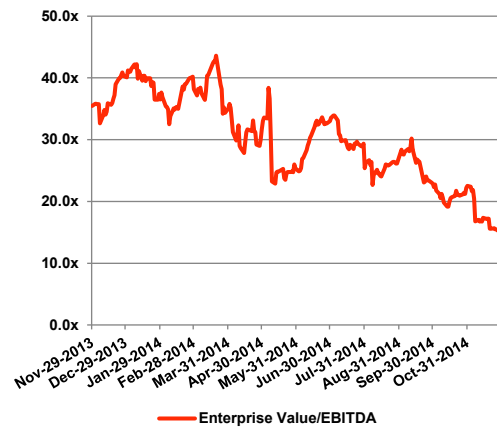
Revenue Multiple Trends



Company Revenue Multiples

	11/30/2014	11/30/2013
Broadband Wireless Index	1.8x	2.7x
Aviat Networks	0.1x	0.2x
Ceragon Networks	0.2x	0.4x
DragonWave	0.6x	0.6x
Redline Communications	1.0x	1.1x
Ubiquiti Networks	3.8x	8.4x

EBITDA Multiple Trends



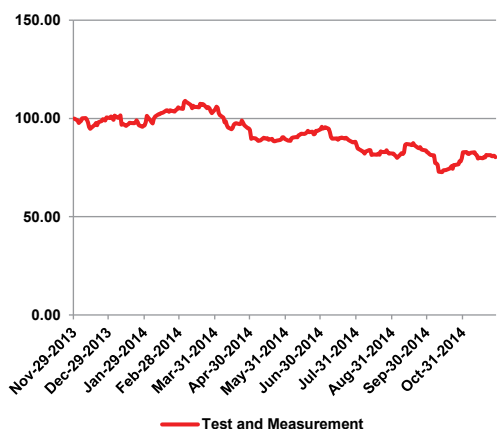
Company EBITDA Multiples

	11/30/2014	11/30/2013
Broadband Wireless Index	15.1x	35.4x
Aviat Networks	NM	76.9x
Ceragon Networks	NM	NM
DragonWave	NM	NM
Redline Communications	768.0x	NM
Ubiquiti Networks	11.1x	26.0x

Source: Capital IQ

Sub Sector Analysis: Test and Measurement

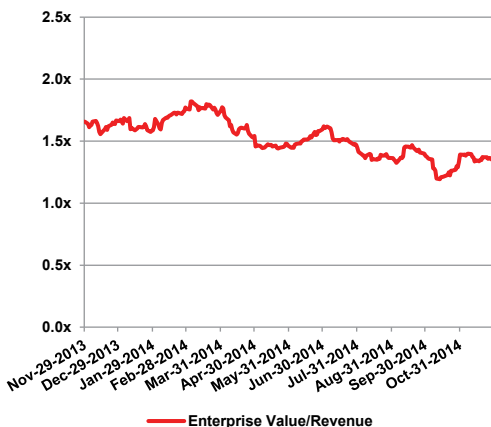
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Test and Measurement Index	-19.7%	-2.2%
Anite	-18.2%	-23.1%
Anritsu	-41.6%	-18.6%
Ascom	-2.9%	10.6%
EXFO	-33.0%	-22.5%
Gigamon	-50.9%	31.8%
Ixia	-20.2%	7.8%
JDS Uniphase	9.9%	15.5%
Spirant	-40.8%	-38.5%

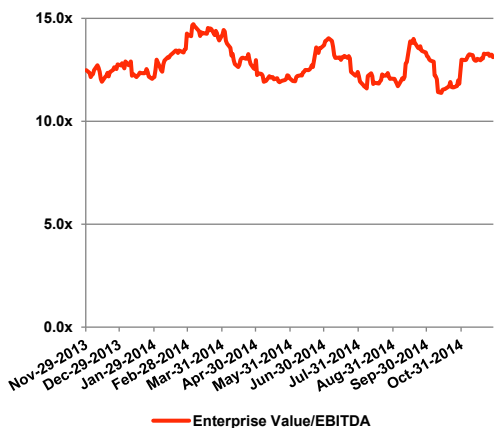
Revenue Multiple Trends



Company Revenue Multiples

	11/30/2014	11/30/2013
Test and Measurement Index	1.4x	1.7x
Anite	1.8x	2.0x
Anritsu	0.8x	1.5x
Ascom	1.1x	1.1x
EXFO	0.6x	1.1x
Gigamon	2.2x	6.2x
Ixia	2.0x	2.0x
JDS Uniphase	1.6x	1.4x
Spirant	1.1x	2.1x

EBITDA Multiple Trends



Company EBITDA Multiples

	11/30/2014	11/30/2013
Test and Measurement Index	13.1x	12.5x
Anite	10.8x	9.6x
Anritsu	5.0x	9.0x
Ascom	8.4x	8.6x
EXFO	12.7x	17.8x
Gigamon	NM	NM
Ixia	30.5x	10.1x
JDS Uniphase	17.8x	15.9x
Spirant	8.4x	10.5x

Source: Capital IQ

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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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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.

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