



Rating  
**Buy**

North America  
United States  
**TMT**  
Data Networking

Company  
**Commscope**

Reuters Bloomberg Exchange Ticker  
COMM.OQ COMM US NMS COMM

Date  
24 July 2018

## Company Update

Price at 24 Jul 2018 (USD)	30.14
Price Target	40.00
52-week range	41.04 - 27.59

# COMM Near "Cyclical Bottom"; Positive FY19E+ Catalysts: DB Ideas Piece

Calling for a "Cyclical Bottom" on COMM; +30% Outperformance Potential to our \$40 Target; Positive FY19E+ Product Cycles; **BUY**

### Portfolio Manager Summary

In this fundamental piece, we share an out of consensus view on **BUY** rated COMM.

Specifically, we are calling for a "cyclical bottom" on COMM at current levels.

We attribute the past several quarters of underperformance and downward estimate revisions to primarily a gradual "dampening" in the legacy spend cycles: i.e. 4G, Copper Connectivity, etc, plus a delayed 2H17+ start to FirstNet upgrades, etc (see Figure 1).

Another detractor to FY17 and YTD performance in our view has been COMM successively guiding down their Full Year outlook during quarterly EPS episodes last year and also during the recent Q1/18 Print, mainly due to limited order visibility and product cycle volatility.

That said, it is reasonable to assert that COMM is near a "cyclical bottom", noting a "dampening effect" to prior quarter fundamentals from legacy spend cycles, and the onset of a major multi-year buildout cycle. This is starting 1H19+, in 5G Broadband, and in Fiber Connectivity at Cloud Data Centers and in Telco and Cable Networks - i.e. "Fiber Deep" or "Fiber Densification".

The market, interestingly enough, appears to be calling the cyclical bottom on COMM from a valuation point of view: i.e. investors ascribing the stock a 10x P/E multiple on our \$3 FY20E Earnings Power view; a meaningful discount to ~17x P/E peer comp.

The core insight driving our call on COMM is our reasoning that meaningful Alpha is generated when investors take "out of consensus" positions near "cyclical tops or bottoms".

Investors and analysts have to partly rely on "channel checks" when picking Infra Networking stocks in between cyclical tops and bottoms: CIEN and the Optical component complex are a case in point.

### Valuation & Risks

Vijay Bhagavath, Ph.D.

Research Analyst  
+1-415-617-3324

Brian Yun  
Research Associate  
+1-212-250-8928

### Price/price relative



Performance (%)	1m	3m	12m
Absolute	2.8	-25.7	-15.0
S&P 500 INDEX	2.4	7.1	14.2

Source: Deutsche Bank

### Stock & option liquidity data

Market Cap (USDm)	5,785.9
Shares outstanding (m)	192.0
Free float (%)	100
Volume (24 Jul 2018)	333,172
Option volume (und. shrs., 1M avg.)	-

Source: Deutsche Bank



We action our call on COMM, doing a bottoms up Scenario Analysis on how COMM's fundamentals would modestly inflect as new spend cycles in 5G Broadband, Data Center and Carrier Network Fiber Connectivity kick-start from 1H19+.

We refer clients to our COMM - Scenario Analysis versus our Published Estimates snapshot on Figure 2, and further color on our proprietary Segment Growth Model view in Figures 3-6.

On pages 10-11, we summarize relevant industry data points for COMM.

**Bigger Picture:** COMM is a stock for the Patient Investor.

We are sticking with our positive mid term outlook - noting a derisked (albeit volatile) stock near a "cyclical bottom" and an improving FY19E+ "spend cycle" and "new order flow and design wins" in Cloud Data Center Fiber Connectivity and in Carrier Fiber Densification, heading into Q2/19+.

On the M&A front, management is likely to focus on acquisitions in the \$100s of million range versus transformative deals, given balance sheet constraints.

We remain with our Buy rating. Our \$40 Price Target is a modest ~14x P/E on our \$2.95 FY20E EPS View.

We are introducing our FY21 revenue and EPS estimates:

FY21 is \$5.56B and \$3.25 (~5.5% Top Line; ~10% EPS growth).

#### **COMM Scenario Analysis Methodology**

Our COMM Scenario Analysis methodology is summed below:

#### **Connectivity Solutions**

In our Scenario View, we are modeling COMM's Fiber Connectivity business in FY19-21E to modestly accelerate versus our published model view for FY19E to FY21E.

This is based on our anticipation for new order flow in Telco and Cable Fiber Densification rollouts in the US, Western Europe, India, etc, and more importantly, new design wins at US Cloud and Content Provider Data Centers, heading into Q2/19+.

Modest acceleration in Fiber Cable Solutions Revenues coupled with a lower level of deceleration in Copper Cable Solutions Revenues results in Connectivity Solutions Revenues in our FY19 Scenario View likely to grow at 4.3% Y/Y versus our 3.8% growth published view.

For FY20E our Scenario View calls for 6% Y/Y growth versus our 5% growth published view; and for FY21E our Scenario View clocks at ~7% Y/Y growth versus our ~6% published view.

#### **Mobility Solutions**



In our Scenario View, we accelerate the rate of growth for Macro Cell Site Revenues and 5G Antenna Solutions Revenues related to Metro and Small Cells as we believe COMM to be one of the key Antenna Solutions suppliers for 5G Fixed and Mobile Broadband rollouts, in the US and in parts of Developed Asia in particular for FY19E to FY21E.

Specifically, for 5G Antenna Solutions Revenues related to Metro and Small Cells, our Scenario View calls for FY19E revenues to grow at +200% Y/Y versus our published view for +175%.

For FY20E, our Scenario View calls for 5G Antenna Revenues to grow at ~74% Y/Y versus our published view for ~61% Y/Y; and for FY21 at ~44% Y/Y versus our published view for ~40%.

Our Scenario View calls for COMM's FY19E Mobility Solutions Revenues likely to grow at 7.2% Y/Y versus our published view for 6.4%.

For FY20E, our Scenario View calls for 6.7% Y/Y growth versus our published view for 5.7%; and FY21E at 6.0% Y/Y versus our published view for 5.2% growth .

Big Picture, our Scenario View calls for COMM's Total Revenues for FY19 likely to grow at 5.5% Y/Y versus our published view for 4.9%; for FY20 at 6.3% Y/Y versus our published view for 5.3%; and for FY21 at 6.5% Y/Y versus our published view for 5.5%.

Overall, our Scenario view calls for \$2.80 in Pro Forma EPS for COMM for FY19 - i.e. 14.4% Earnings Growth versus our published view for \$2.65, 8.1% Y/Y growth.

For FY20, our Scenario View calls for \$3.15 in EPS, 12.4% Y/Y growth versus our published view for \$2.95, 11.1% Y/Y growth; and for FY21, \$3.50 in EPS, 11.0% Y/Y growth versus our published view for \$3.25, 10.4% Y/Y growth.

#### Valuation and Risks

Our \$40 Price Target (implies ~14x P/E on DB FY20E of \$2.95) reflects our published FY18-20 and new FY21 revenue and EPS estimates.

Our \$40 PT is derived using DCF analysis (WACC of 10.5%; 6% perpetual growth rate) - our primary valuation method.

Key risks: 1) Volatility in carrier capex and network rollout cycles; 2) Customer concentration risks; 3) Unanticipated share shifts versus peers.

Refer to Figure 7 for our Valuation Snapshot on COMM.

Forecasts and ratios					
Year End Dec 31	2017A		2019E		
	Actual	FAS123R	Proforma	FAS123R	Proforma
1Q EPS	0.17	0.17A	0.49A	0.24	0.55
2Q EPS	0.28	0.34	0.64	0.37	0.67
3Q EPS	0.26	0.36	0.67	0.40	0.71
4Q EPS	0.27	0.35	0.65	0.42	0.72
FY EPS (USD)	0.98	1.23	2.45	1.43	2.65
Revenue (USDm)	4,560.6	4,768.5	—	5,000.6	—

Source: Deutsche Bank estimates, company data



In the section below we highlight:

- **Figure 1: COMM's Reported and Guidance Mid point Versus Consensus**
- **Figure 2: COMM Segment Model Summary: DB Scenario View versus DB Published View**
- **Figures 3-4: DB Scenario View: Detailed COMM Segment Model**
- **Figures 5-6: DB Published View: Detailed COMM Segment Model**
- **Pages 10-11: Relevant Industry Data Points for COMM**

## COMM's Reported and Guidance Mid point Versus Consensus

Figure 1: COMM's Reported and Guidance Mid point Versus Consensus Expectations and Full Year Outlook

COMM's Reported and Guidance Mid point Versus Consensus Expectations and Full Year Outlook			
	Q1 FY17 Print	Q2 FY17 Guidance (Midpoint)	FY17 Outlook
Revenues	In-line with Consensus	Below Consensus	Lowered
Pro Forma EPS	Light Versus Consensus	Below Consensus	Lowered
Q2 FY17 Print			
Revenues	Light Versus Consensus	Below Consensus	Lowered
Pro Forma EPS	Below Consensus	Below Consensus	Lowered
Q3 FY17 Print			
Revenues	In-line with Consensus	In-line with Consensus	Moved up
Pro Forma EPS	Above Consensus	Below Consensus	Lowered
Q4 FY17 Print			
Revenues	Above Consensus	Light Versus Consensus	NA
Pro Forma EPS	Light Versus Consensus	Below Consensus	NA
Q1 FY18 Print			
Revenues	Above Consensus	Above Consensus	Unchanged
Pro Forma EPS	Above Consensus	Light Versus Consensus	Lowered

Source: FactSet and Company Filings



## COMM Segment Model Summary: DB Scenario View versus Published View

Figure 2: COMM Segment Model Summary: DB Scenario View versus Published View

DB Scenario View for COMM				Current DB Published Modeled View for COMM			
	FY19E	FY20E	FY21E		FY19E	FY20E	FY21E
<b>Revenues</b>	<b>\$5,029</b>	<b>\$5,347</b>	<b>\$5,696</b>	<b>Revenues</b>	<b>\$5,001</b>	<b>\$5,266</b>	<b>\$5,558</b>
<i>Growth (Y/Y)</i>	<i>5.5%</i>	<i>6.3%</i>	<i>6.5%</i>	<i>Growth (Y/Y)</i>	<i>4.9%</i>	<i>5.3%</i>	<i>5.5%</i>
<b>GAAP Gross Profit</b>	<b>\$1,921</b>	<b>\$2,085</b>	<b>\$2,250</b>	<b>GAAP Gross Profit</b>	<b>\$1,889</b>	<b>\$2,027</b>	<b>\$2,162</b>
<i>Growth (Y/Y)</i>	<i>8.5%</i>	<i>8.6%</i>	<i>7.9%</i>	<i>Growth (Y/Y)</i>	<i>6.7%</i>	<i>7.3%</i>	<i>6.6%</i>
<b>GAAP Gross Margins</b>	<b>38.2%</b>	<b>39.0%</b>	<b>39.5%</b>	<b>GAAP Gross Margins</b>	<b>37.8%</b>	<b>38.5%</b>	<b>38.9%</b>
<b>Non-GAAP Operating Income</b>	<b>\$1,003</b>	<b>\$1,096</b>	<b>\$1,194</b>	<b>Non-GAAP Operating Income</b>	<b>\$959</b>	<b>\$1,038</b>	<b>\$1,121</b>
<i>Growth (Y/Y)</i>	<i>11.2%</i>	<i>9.3%</i>	<i>8.9%</i>	<i>Growth (Y/Y)</i>	<i>6.4%</i>	<i>8.1%</i>	<i>8.1%</i>
<b>Non-GAAP Operating Margins</b>	<b>19.9%</b>	<b>20.5%</b>	<b>21.0%</b>	<b>Non-GAAP Operating Margins</b>	<b>19.2%</b>	<b>19.7%</b>	<b>20.2%</b>
<b>Non-GAAP Net Income</b>	<b>\$555</b>	<b>\$629</b>	<b>\$705</b>	<b>Non-GAAP Net Income</b>	<b>\$524</b>	<b>\$588</b>	<b>\$655</b>
<i>Growth (Y/Y)</i>	<i>15.4%</i>	<i>13.5%</i>	<i>12.0%</i>	<i>Growth (Y/Y)</i>	<i>9.1%</i>	<i>12.2%</i>	<i>11.4%</i>
<b>Non-GAAP Net Income Margins</b>	<b>11.0%</b>	<b>11.8%</b>	<b>12.4%</b>	<b>Non-GAAP Net Income Margins</b>	<b>10.5%</b>	<b>11.2%</b>	<b>11.8%</b>
<b>Non-GAAP EPS: Diluted</b>	<b>\$2.80</b>	<b>\$3.15</b>	<b>\$3.50</b>	<b>Non-GAAP EPS: Diluted</b>	<b>\$2.65</b>	<b>\$2.95</b>	<b>\$3.25</b>
<i>Growth (Y/Y)</i>	<i>14.4%</i>	<i>12.4%</i>	<i>11.0%</i>	<i>Growth (Y/Y)</i>	<i>8.1%</i>	<i>11.1%</i>	<i>10.4%</i>

Source: Deutsche Bank Estimates



## COMM Segment Model [DB Scenario View]

Figure 3: DB Scenario View: COMM Segment Model Summary (Part 1 of 2)

<i>All figures in \$M; Except Ratios</i>					
<b>Summary of COMM's Segment Revenue Model - (DB Scenario View)</b>					
	FY18E	FY19E	FY20E	FY21E	FY18E-FY21E CAGR
<b>I) Connectivity Solutions Revenues</b>					
<b>I.A) Fiber Optic Cable Solutions Revenues (I.A.i + I.A.ii)</b>	<b>\$1,504</b>	<b>\$1,694</b>	<b>\$1,936</b>	<b>\$2,212</b>	<b>14%</b>
Growth (Y/Y)	8.3%	12.7%	14.3%	14.2%	
as % of Connectivity Solutions Revenues (DB View)	52.3%	56.5%	60.9%	65.1%	
as % of Total Revenues	31.5%	33.7%	36.2%	38.8%	
<b>I.A.i) Service Provider - Revenues</b>	<b>\$941</b>	<b>\$1,070</b>	<b>\$1,231</b>	<b>\$1,412</b>	<b>14%</b>
Growth (Y/Y)	9.5%	13.7%	15.0%	14.8%	
as % of Fiber Optic Cable Solutions Revenues (DB View)	62.6%	63.2%	63.5%	63.8%	
as % of Connectivity Solutions Revenues	32.7%	35.7%	38.7%	41.5%	
<b>I.A.ii) Enterprise - Revenues (I.A.ii.a + I.A.ii.b)</b>	<b>\$563</b>	<b>\$624</b>	<b>\$706</b>	<b>\$800</b>	<b>12%</b>
Growth (Y/Y)	6.3%	10.9%	13.1%	13.4%	
as % of Fiber Optic Cable Solutions Revenues (DB View)	37.4%	36.8%	36.5%	36.2%	
as % of Connectivity Solutions Revenues	19.6%	20.8%	22.2%	23.5%	
<b>I.A.ii.a) Cloud Providers (Hyperscale, Multi-tenant,etc) - Revenues</b>	<b>\$65</b>	<b>\$110</b>	<b>\$177</b>	<b>\$256</b>	<b>58%</b>
Growth (Y/Y)	35.7%	70.3%	60.0%	45.0%	
as % of Enterprise Revenues	11.5%	17.7%	25.0%	32.0%	
as % of Fiber Optic Cable Solutions Revenues (DB View)	4.3%	6.5%	9.1%	11.6%	
as % of Connectivity Solutions Revenues	2.3%	3.7%	5.6%	7.5%	
<b>I.A.ii.b) Other Enterprise Revenues</b>	<b>\$498</b>	<b>\$514</b>	<b>\$529</b>	<b>\$544</b>	<b>3%</b>
Growth (Y/Y)	3.4%	3.2%	3.0%	2.8%	
as % of Enterprise Revenues	88.5%	82.3%	75.0%	68.0%	
as % of Fiber Optic Cable Solutions Revenues (DB View)	33.1%	30.3%	27.3%	24.6%	
as % of Connectivity Solutions Revenues	17.3%	17.1%	16.6%	16.0%	
<b>I.B) Copper Cable Solutions Revenues</b>	<b>\$1,372</b>	<b>\$1,306</b>	<b>\$1,245</b>	<b>\$1,188</b>	<b>-5%</b>
Growth (Y/Y)	-3.5%	-4.8%	-4.6%	-4.6%	
as % of Connectivity Solutions Revenues	47.7%	43.5%	39.1%	34.9%	
as % of Total Revenues	28.8%	26.0%	23.3%	20.8%	
<b>I) Connectivity Solutions Revenues (I.A + I.B)</b>	<b>\$2,875</b>	<b>\$3,000</b>	<b>\$3,181</b>	<b>\$3,400</b>	<b>6%</b>
Growth (Y/Y)	2.3%	4.3%	6.0%	6.9%	
as % of Total Revenues	60.3%	59.7%	59.5%	59.7%	

Source: Deutsche Bank Estimates and Company Filings



Figure 4: DB Scenario View: COMM Segment Model Summary (Part 2 of 2)

<b>Summary of COMM's Segment Revenue Model - (DB Scenario View)</b>					
	FY18E	FY19E	FY20E	FY21E	FY18E-FY21E CAGR
<b>II) Mobility Solutions Revenues</b>					
<b>II.A) Macro Cell Site Solutions Revenues</b>	<b>\$1,380</b>	<b>\$1,489</b>	<b>\$1,593</b>	<b>\$1,689</b>	<b>7%</b>
Growth (Y/Y)	10.0%	7.9%	7.0%	6.0%	
as % of Mobility Solutions Revenues (DB View)	72.9%	73.4%	73.6%	73.5%	
as % of Total Revenues	28.9%	29.6%	29.8%	29.6%	
<b>II.B) Metro, DAS and Small Cell Solutions Revenues (II.B.i + II.B.ii)</b>	<b>\$513</b>	<b>\$540</b>	<b>\$572</b>	<b>\$607</b>	<b>6%</b>
Growth (Y/Y)	3.3%	5.3%	6.0%	6.1%	
as % of Mobility Solutions Revenues (DB View)	27.1%	26.6%	26.4%	26.5%	
as % of Total Revenues	10.8%	10.7%	10.7%	10.7%	
<b>II.B.i) 5G Antenna Solutions - Metro and Small Cells</b>	<b>\$23</b>	<b>\$71</b>	<b>\$123</b>	<b>\$177</b>	<b>97.5%</b>
Growth (Y/Y)	208.4%	73.6%	43.9%		
as % of Metro, DAS & Small Cell Solutions Revenues	1.7%	4.8%	7.7%	10.5%	
as % of Mobility Solutions Revenue	1.2%	3.5%	5.7%	7.7%	
<b>II.B.ii) 4G and Other Technologies Metro, DAS and Small Cell Revenues</b>	<b>\$490</b>	<b>\$469</b>	<b>\$449</b>	<b>\$430</b>	<b>-4.2%</b>
Growth (Y/Y)	-4.3%	-4.2%	-4.2%		
as % of Metro, DAS & Small Cell Revenues	35.5%	31.5%	28.2%	25.5%	
as % of Mobility Solutions Revenue	25.9%	23.1%	20.7%	18.7%	
<b>II) Mobility Solutions Revenues (II.A + II.B)</b>	<b>\$1,893</b>	<b>\$2,029</b>	<b>\$2,166</b>	<b>\$2,296</b>	<b>7%</b>
Growth (Y/Y)	8.1%	7.2%	6.7%	6.0%	
as % of Total Revenues	39.7%	40.3%	40.5%	40.3%	
<b>Total Revenues (I + II)</b>	<b>\$4,769</b>	<b>\$5,029</b>	<b>\$5,347</b>	<b>\$5,696</b>	<b>6%</b>
<b>Growth (Y/Y)</b>	<b>4.6%</b>	<b>5.5%</b>	<b>6.3%</b>	<b>6.5%</b>	

Source: Deutsche Bank Estimates and Company Filings



## COMM Segment Model [DB Published View]

Figure 5: DB Published View: COMM Segment Model Summary (Part 1 of 2)

<i>All figures in \$M; Except Ratios</i>					
Summary of COMM's Segment Revenue Model - (DB Published View)					
	FY18E	FY19E	FY20E	FY21E	FY18E-FY21E CAGR
<b>I) Connectivity Solutions Revenues</b>					
<b>I.A) Fiber Optic Cable Solutions Revenues (I.A.i + I.A.ii)</b>	<b>\$1,504</b>	<b>\$1,683</b>	<b>\$1,898</b>	<b>\$2,140</b>	<b>12%</b>
Growth (Y/Y)	8.3%	11.9%	12.8%	12.8%	
as % of Connectivity Solutions Revenues (DB View)	52.3%	56.4%	60.5%	64.5%	
as % of Total Revenues	31.5%	33.6%	36.0%	38.5%	
<b>I.A.i) Service Provider - Revenues</b>	<b>\$941</b>	<b>\$1,066</b>	<b>\$1,210</b>	<b>\$1,376</b>	<b>14%</b>
Growth (Y/Y)	9.5%	13.3%	13.5%	13.8%	
as % of Fiber Optic Cable Solutions Revenues (DB View)	62.6%	63.3%	63.7%	64.3%	
as % of Connectivity Solutions Revenues	32.7%	35.7%	38.6%	41.5%	
<b>I.A.ii) Enterprise - Revenues (I.A.ii.a + I.A.ii.b)</b>	<b>\$563</b>	<b>\$617</b>	<b>\$688</b>	<b>\$764</b>	<b>11%</b>
Growth (Y/Y)	6.3%	9.6%	11.6%	11.1%	
as % of Fiber Optic Cable Solutions Revenues (DB View)	37.4%	36.7%	36.3%	35.7%	
as % of Connectivity Solutions Revenues	19.6%	20.7%	21.9%	23.0%	
<b>I.A.ii.a) Cloud Providers (Hyperscale, Multi-tenant,etc) - Revenues</b>	<b>\$65</b>	<b>\$104</b>	<b>\$161</b>	<b>\$224</b>	<b>51%</b>
Growth (Y/Y)	35.7%	60.0%	55.0%	39.1%	
as % of Enterprise Revenues	11.5%	16.8%	23.4%	29.3%	
as % of Fiber Optic Cable Solutions Revenues (DB View)	4.3%	6.2%	8.5%	10.4%	
as % of Connectivity Solutions Revenues	2.3%	3.5%	5.1%	6.7%	
<b>I.A.ii.b) Other Enterprise Revenues</b>	<b>\$498</b>	<b>\$513</b>	<b>\$527</b>	<b>\$541</b>	<b>3%</b>
Growth (Y/Y)	3.4%	3.0%	2.8%	2.5%	
as % of Enterprise Revenues	88.5%	83.2%	76.6%	70.7%	
as % of Fiber Optic Cable Solutions Revenues (DB View)	33.1%	30.5%	27.8%	25.3%	
as % of Connectivity Solutions Revenues	17.3%	17.2%	16.8%	16.3%	
<b>I.B) Copper Cable Solutions Revenues</b>	<b>\$1,372</b>	<b>\$1,303</b>	<b>\$1,238</b>	<b>\$1,176</b>	<b>-5%</b>
Growth (Y/Y)	-3.5%	-5.0%	-5.0%	-5.0%	
as % of Connectivity Solutions Revenues	47.7%	43.6%	39.5%	35.5%	
as % of Total Revenues	28.8%	26.1%	23.5%	21.2%	
<b>I) Connectivity Solutions Revenues (I.A + I.B)</b>	<b>\$2,875</b>	<b>\$2,986</b>	<b>\$3,136</b>	<b>\$3,316</b>	<b>5%</b>
Growth (Y/Y)	2.3%	3.8%	5.0%	5.8%	
as % of Total Revenues	60.3%	59.7%	59.5%	59.7%	

Source: Deutsche Bank Estimates and Company Filings



Figure 6: DB Published View: COMM Segment Model Summary (Part 2 of 2)

<i>All figures in \$M; Except Ratios</i>					
<b>Summary of COMM's Segment Revenue Model - (DB Published View)</b>					
	FY18E	FY19E	FY20E	FY21E	FY18E-FY21E CAGR
<b>II) Mobility Solutions Revenues</b>					
<b>II.A) Macro Cell Site Solutions Revenues</b>	\$1,380	\$1,484	\$1,580	\$1,671	7%
Growth (Y/Y)	10.0%	7.5%	6.5%	5.8%	
as % of Mobility Solutions Revenues (DB View)	72.9%	73.6%	74.2%	74.5%	
as % of Total Revenues	28.9%	29.7%	30.0%	30.1%	
<b>II.B) Metro, DAS and Small Cell Solutions Revenues (II.B.i)</b>	<b>\$513</b>	<b>\$531</b>	<b>\$550</b>	<b>\$571</b>	4%
+ II.B.ii)	3.3%	3.6%	3.5%	3.7%	
Growth (Y/Y)	27.1%	26.4%	25.8%	25.5%	
as % of Mobility Solutions Revenues (DB View)	10.8%	10.6%	10.4%	10.3%	
<b>II.B.i) 5G Antenna Solutions - Metro and Small Cells</b>	<b>\$23</b>	<b>\$63</b>	<b>\$102</b>	<b>\$143</b>	84%
Growth (Y/Y)	1.7%	4.3%	6.5%	8.5%	
as % of Metro, DAS & Small Cell Solutions Revenues	1.2%	3.2%	4.8%	6.4%	
<b>II.B.ii) 4G and Other Technologies Metro, DAS and Small Cell Revenues</b>	<b>\$490</b>	<b>\$468</b>	<b>\$448</b>	<b>\$428</b>	-4%
Growth (Y/Y)	35.5%	-4.5%	-4.2%	-4.5%	
as % of Metro, DAS & Small Cell Revenues	25.9%	31.5%	28.4%	25.6%	
as % of Mobility Solutions Revenue	23.2%	21.0%	19.1%		
<b>II) Mobility Solutions Revenues (II.A + II.B)</b>	<b>\$1,893</b>	<b>\$2,015</b>	<b>\$2,130</b>	<b>\$2,242</b>	6%
Growth (Y/Y)	8.1%	6.4%	5.7%	5.2%	
as % of Total Revenues	39.7%	40.3%	40.5%	40.3%	
<b>Total Revenues (I + II)</b>	<b>\$4,769</b>	<b>\$5,001</b>	<b>\$5,266</b>	<b>\$5,558</b>	5%
<b>Growth (Y/Y)</b>	<b>4.6%</b>	<b>4.9%</b>	<b>5.3%</b>	<b>5.5%</b>	

Source: Deutsche Bank Estimates and Company Filings



## Relevant Industry Data Points for COMM

In the section below, we highlight relevant industry data points for COMM.

### ERIC Q2 FY18 EPS Call Highlights

- 5G standards have accelerated more than a year. As a result, operators are preparing to invest in network buildouts sooner than anticipated; ERIC noted increased activity in 5G customer engagement and build discussions.

The company highlighted strong growth in North America and Europe 5G interest. Management noted "falling" LTE investments in China (likely shifting to 5G).

Timing of 5G buildouts are anticipated in the back half of 2018 / early 2019.

- According to ERIC, early business use cases for 5G is likely to be around Enhanced Mobile Broadband; growing interest in Fixed Wireless Access was also highlighted.

### VZ Q2 FY18 EPS Call Highlights

- VZ highlighted increasing customer demand for Fiber Access (Fiber deployments in 50+ cities).
- Management called out solid progress on 5G use cases: Fixed Wireless Access anticipated to be in 4 markets this year; 5G mobility is likely to be a focal point in 2019.
- FY18 CapEx Guidance: Lower end of the \$17.0-17.8B range, including commercial launch of 5G - i.e. Residential Broadband and Mobility launches.

FY19 CapEx likely to be "reasonably consistent" with FY18 (potential for 5G related CapEx acceleration depending on demand).

### T Q2 FY18 EPS Call Highlights

- T highlighted strength in fiber adoption: 9M customer locations (anticipated to reach 14M locations next year).
- Millimeter wave mobile 5G service trials on track to launch in select parts of 12 markets by the end of the year.
- FirstNet update: T anticipates ~12-15k band 14 sites operational by the end of 2018 (T is "ahead of contractual commitments").

There are ~1,500 public safety agencies across 52 states and territories that are part of FirstNet (2x network adoption since April).

- CapEx: \$25B (\$22B net of expected FirstNet reimbursements and vendor financing).



### CCI Q2 FY18 EPS Call Highlights

- CCI noted momentum in customer demand across Towers and Fiber infra assets - i.e. growing backlog of committed new business. The company is seeing activity at all 4 major operators.
  - Tower: Customers improving and densifying networks - CCI leasing activity on track to be higher Y/Y in 2018.
  - Fiber: Increasing deployments of fiber fed small cells at scale. CCI highlighted increased small cell booking activity in Q2.



## Valuation and Risks

Our \$40 Price Target (implies ~14x P/E on DB FY20E of \$2.95) reflects our published FY18-20 and new FY21 revenue and EPS estimates.

Our \$40 PT is derived using DCF analysis (WACC of 10.5%; 6% perpetual growth rate) - our primary valuation method.

Figure 7: COMM Valuation Snapshot

	Pro Forma				GAAP			
	FY18E	FY19E	FY20E	FY21E	FY18E	FY19E	FY20E	FY21E
Target Price	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0
EPS - Diluted	\$2.45	\$2.65	\$2.95	\$3.25	\$1.23	\$1.43	\$1.85	\$2.34
P/E	16.3x	15.1x	13.6x	12.3x	32.6x	28.0x	21.6x	17.1x

	EV Ratios on Target Price			
	FY18E	FY19E	FY20E	FY21E
Target Price	40.0	40.0	40.0	40.0
Number of Shares	196,059	197,784	199,584	201,384
Market Capitalization	7,842,360	7,911,360	7,983,360	8,055,360
Add: Net Debt/(Cash)	3,413,411	2,828,510	2,224,102	1,587,630
Add: Non-controlling Interests	-	-	-	-
Less: Long-term Investments	-	-	-	-
Enterprise Value (EV)	11,255,771	10,739,870	10,207,462	9,642,990
EV/ Sales	2.4x	2.1x	1.9x	1.7x
EV/ FCFF	17.9x	16.1x	14.8x	13.2x
EV/ FCFE	25.5x	30.5x	26.7x	22.5x
FCFE Yield	5.6%	4.5%	4.8%	5.3%

Source: Deutsche Bank Estimates

## Risks

1. Volatility in carrier capex and network rollout cycles;
2. Customer concentration risks;
3. Changing technological trends and customer demand trends;
4. Negative impact from product mix impacting gross margins;
5. Share loss and design win loss in Fiber Connectivity solutions to GLW, etc.



# Appendix 1

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Company	Ticker	Recent price*	Disclosure
Commscope	COMM.OQ	30.08 (USD) 23 Jul 2018	2, 7, 8, 14, 15

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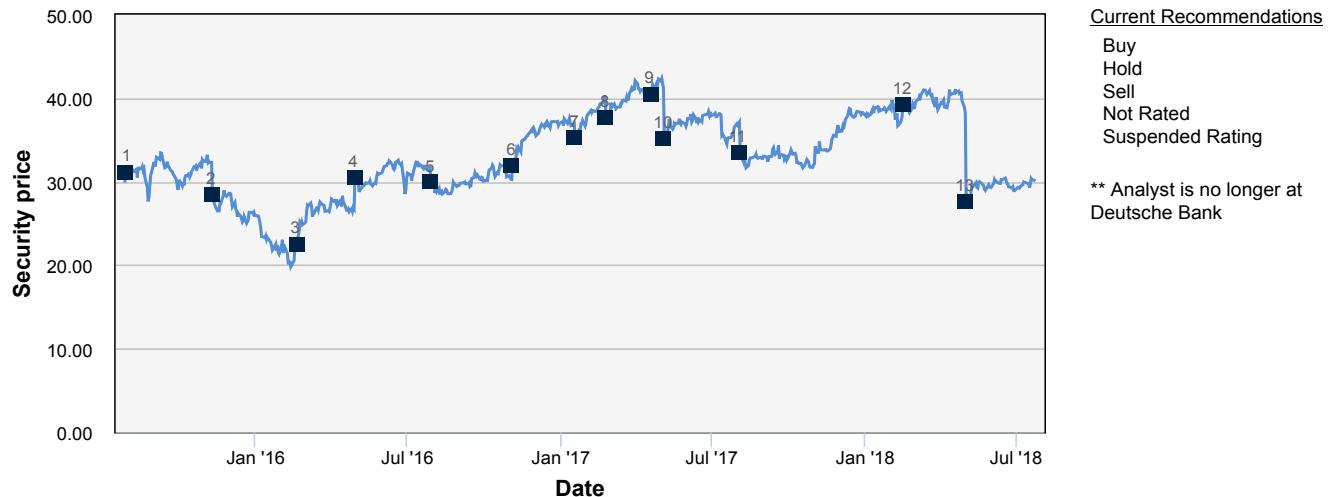
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(as of 07/24/2018)



1. 07/29/2015	Buy, Target Price Change USD 37.00 Brian Modoff**	8. 02/24/2017	Buy, Target Price Change USD 42.00 Vijay Bhagavath
2. 11/10/2015	Buy, Target Price Change USD 35.00 Vijay Bhagavath	9. 04/19/2017	Buy, Target Price Change USD 50.00 Vijay Bhagavath
3. 02/19/2016	Buy, Target Price Change USD 33.00 Vijay Bhagavath	10. 05/05/2017	Buy, Target Price Change USD 46.00 Vijay Bhagavath
4. 04/29/2016	Buy, Target Price Change USD 36.00 Vijay Bhagavath	11. 08/04/2017	Buy, Target Price Change USD 42.00 Vijay Bhagavath
5. 07/29/2016	Buy, Target Price Change USD 35.00 Vijay Bhagavath	12. 02/16/2018	Buy, Target Price Change USD 45.00 Vijay Bhagavath
6. 11/04/2016	Buy, Target Price Change USD 38.00 Vijay Bhagavath	13. 05/02/2018	Buy, Target Price Change USD 40.00 Vijay Bhagavath
7. 01/18/2017	Buy, Target Price Change USD 40.00 Vijay Bhagavath		

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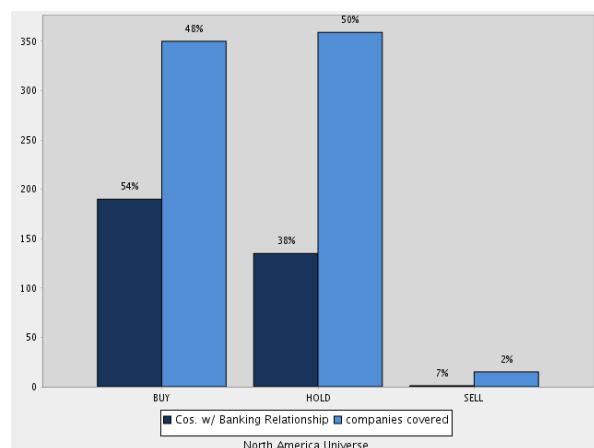
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Group Chief Economist and Global Head of Research

Raj Hindocha  
Global Chief Operating Officer  
Research

Michael Spencer  
Head of APAC Research  
Global Head of Economics

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Paul Reynolds  
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Dave Clark  
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Pam Finelli  
Global Head of  
Equity Derivatives Research

Andreas Neubauer  
Head of Research - Germany

Spyros Mesomeris  
Global Head of Quantitative  
and QIS Research

#### International Production Locations

**Deutsche Bank AG**  
Deutsche Bank Place  
Level 16  
Corner of Hunter & Phillip Streets  
Sydney, NSW 2000  
Australia  
Tel: (61) 2 8258 1234

**Deutsche Bank AG**  
Mainzer Landstrasse 11-17  
60329 Frankfurt am Main  
Germany  
Tel: (49) 69 910 00

**Deutsche Bank AG**  
Filiale Hongkong  
International Commerce Centre,  
1 Austin Road West, Kowloon,  
Hong Kong  
Tel: (852) 2203 8888

**Deutsche Securities Inc.**  
2-11-1 Nagatacho  
Sanno Park Tower  
Chiyoda-ku, Tokyo 100-6171  
Japan  
Tel: (81) 3 5156 6770

**Deutsche Bank AG London**  
1 Great Winchester Street  
London EC2N 2EQ  
United Kingdom  
Tel: (44) 20 7545 8000

**Deutsche Bank Securities Inc.**  
60 Wall Street  
New York, NY 10005  
United States of America  
Tel: (1) 212 250 2500