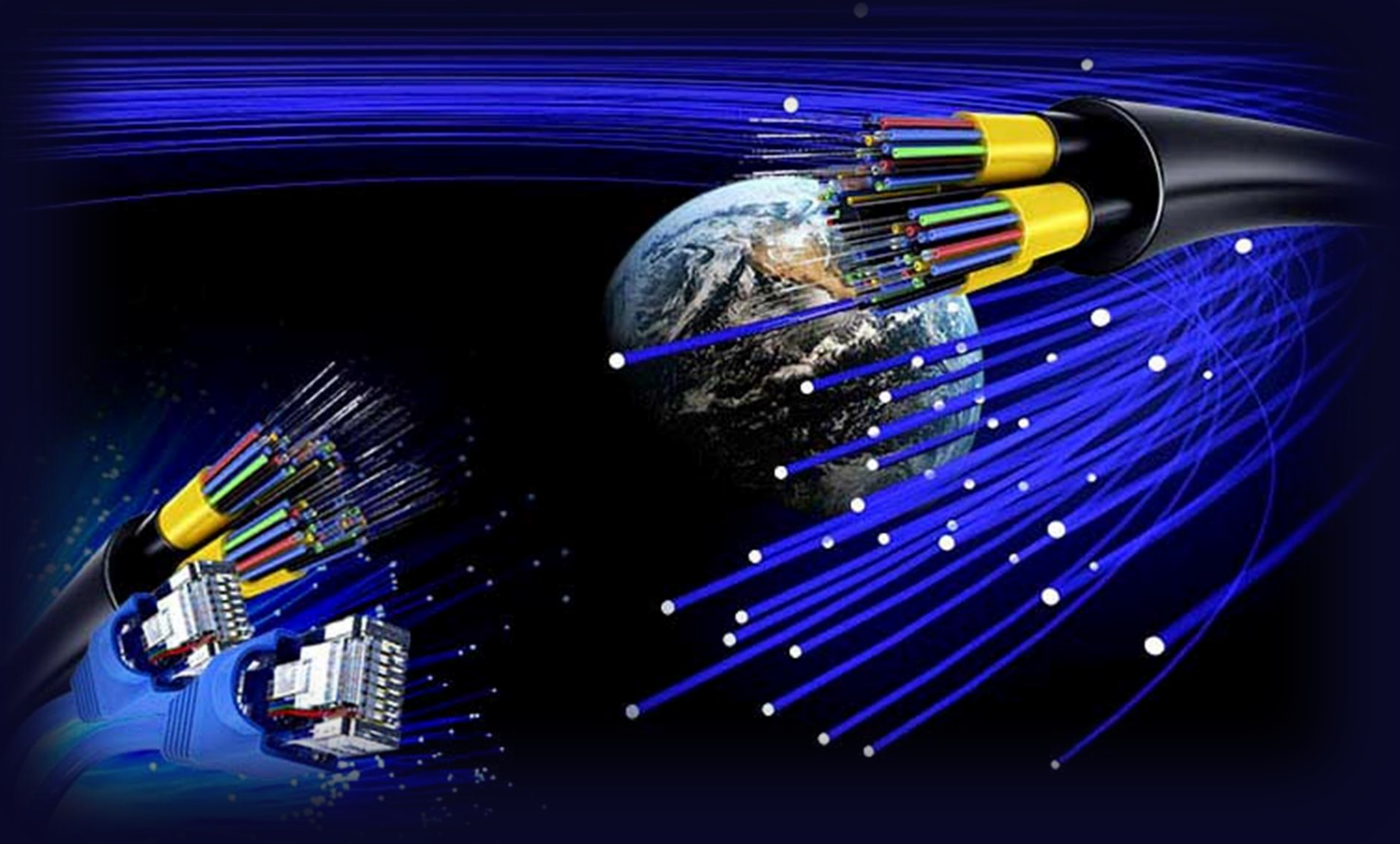
Sterlite Technologies Ltd (SOTL IN)

Data will consume us all; Initiate with ADD



October 18, 2017

Analysts: Harshit Patel (+91-9825406497) / Depesh Kashyap, CFA (+91-7228934327)

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Sterlite Technologies Ltd.

Initiating note | Regular Coverage

Absolute : ADD
Relative : Outperform
12% ATR in 17 months

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Telecom Services

Rating Information	
Price (Rs)	257
Target Price (Rs)	300
Target Date	31st Mar'19
Target Set On	18th Oct'17
Implied yrs of growth (DCF)	15
Fair Value (DCF)	310
Fair Value (DDM)	78
Ind Benchmark	SPBSMIP
Model Portfolio Position	NA

Stock Information	
Market Cap (Rs Mn)	1,02,887
Free Float (%)	45.76 %
52 Wk H/L (Rs)	278/85
Avg Daily Volume (1yr)	16,55,305
Avg Daily Value (Rs Mn)	250
Equity Cap (Rs Mn)	801
Face Value (Rs)	2
Bloomberg Code	SOTL IN

Ownership	Recent	3M	12M
Promoters	54.2 %	-0.1 %	-0.3 %
DII	11.7 %	-0.3 %	-0.4 %
FII	7.9 %	-0.1 %	3.8 %
Public	26.2 %	0.4 %	-3.1 %

Price %	1M	3M	12M
Absolute	15.4 %	62.5 %	148.4 %
Vs Industry	15.2 %	55.8 %	129.4 %
HFCL	-22.7 %	86.6 %	75.9 %
Vindhya Tele	13.6 %	44.9 %	75.7 %

Consolidated Quarterly EPS forecast

Rs/Share	1Q	2Q	3Q	4Q
EPS (17A)	0.9	1.3	1.2	1.6
EPS (18E)	1.5	1.8	1.7	1.9

The wires are being joined, dots being connected. With high-speed internet connectivity and seamless data flow becoming a necessity, demand for optic fibre networks is set to spiral upwards. Sterlite Technologies (SOTL), India's largest vertically integrated supplier of Optic Fibre (OF) and Optic Fibre Cable (OFC), seems to have hit the nail on the head. With end-to-end capabilities in designing, building and managing digital networks, successful foray into services business and a well-timed expansion ahead, it is set to tap opportunities from rising global fibre demand, India's low OF base and GoI's Digital India push. We estimate a revenue/EPS CAGR of 27%/34% over FY17-FY20E with RoEs of 28%/34% in FY18/FY19. Initiate coverage with ADD rating and a Mar'19 TP of Rs. 300 (29x P/E on FY19E).

New user additions, increased data usage to drive global fiber demand: World OFC demand grew at a ~14% CAGR during CY11-CY16. Global IP traffic is set to further increase at a 24% CAGR over CY16-CY21E on new user additions in developing countries. Besides, deepening 4G, FTTX penetration and the advent of 5G networks will drive demand for optical fibre globally.

India to see exponential growth off a lower base, govt.'s digitization thrust: India has one of the lowest cumulative fibre deployed/population ratios in the world (~0.1x vs. ~1.3x/~0.8x for USA/China). Also, only ~15-20% of India's mobile towers are connected by OF compared to ~75-80% for developed countries. Growth in India is likely to be driven by a mix of telecom players, cable TV operators and the government's Digital India push through initiatives such as BharatNet and Smart Cities.

SOTL- uniquely positioned to emerge as a key beneficiary: SOTL has end-to-end capabilities to design, build and manage digital networks. It is the only vertically integrated player in India with preform, fiber and cable production capabilities. The company has also proven its capabilities in system and network integration by successfully executing 3 Smart City projects and a Network for Spectrum (NFS) project for the Indian army. With commissioning of new fiber drawing capacity, increasing OFC utilization and a strong software & services order book, we estimate revenue/EPS CAGR of 27%/34% over FY17-FY20E.

Initiate coverage with ADD, Mar'19 TP of Rs. 300: Given SOTL's unique positioning, market leadership and global diversification, we arrive at our Mar'19 TP of Rs. 300 based on a P/E multiple of 29x on our FY19E EPS of Rs. 10.3 (cross checked with DCF valuation). We initiate coverage on the stock with an ADD rating.

Consolidated Financials

Rs. Mn YE Mar	FY17A	FY18E	FY19E	FY20E
Sales	24,489	31,370	43,021	50,547
EBITDA	5,189	6,867	9,192	10,726
Depreciation	1,592	1,762	2,044	2,367
Interest Expense	1,229	1,176	1,333	1,522
Other Income	235	188	228	262
Reported PAT	2,014	2,740	4,108	4,853
Recurring PAT	2,014	2,740	4,108	4,853
Total Equity	8,801	10,720	13,592	16,985
Gross Debt	10,925	11,425	14,425	15,625
Cash	1,724	2,299	2,881	3,175
Rs Per Share	**FY17A**	**FY18E**	**FY19E**	**FY20E**
Earnings	5.0	6.8	10.3	12.1
Book Value	22	27	34	42
Dividends	1.3	1.7	2.6	3.0
FCFF	9.1	7.3	2.8	7.9
P/E (x)	51.1	37.6	25.0	21.2
P/B (x)	11.6	9.6	7.6	6.1
EV/EBITDA (x)	22.0	16.6	12.7	10.9
ROE (%)	25 %	28 %	34 %	32 %
Core ROIC (%)	15 %	17 %	20 %	19 %
EBITDA Margin (%)	21 %	22 %	21 %	21 %
Net Margin (%)	8 %	9 %	10 %	10 %

Company Snapshot

How we differ from Consensus

	-	Equirus	Consensus	% Diff	Comment
EPS	FY18E	6.8	7.2	-5 %	Company is guiding US$ 100mn profit by FY20. Our estimates are on the conservative side to consensus.
	FY19E	10.3	10.3	0 %	
Sales	FY18E	31,370	32,399	-3 %	
	FY19E	43,021	41,729	3 %	
PAT	FY18E	2,740	2,883	-5 %	
	FY19E	4,108	4,087	1 %	

Our Key Investment Arguments:

1. Deepening 4G, FTTX penetration and advent of 5G networks will drive Optical Fibre demand globally.
2. India's Optic Fibre deployments would see an exponential growth on a lower base driven by infrastructure investments by Telcos and GoI's Digital India push.
3. With its Silicon-to-Software capabilities SOTL is uniquely positioned to emerge as a key beneficiary. We estimate revenue/PAT to grow at a CAGR (FY17-20E) of 27%/34%.

Key Estimates:

	FY16	FY17e	FY18e	FY19e	FY20e
Gross Revenue from Products (Rs. mn)	17,800	20,108	25,475	33,085	38,217
- Optic fibre volume (mn fkm)	20.1	26.0	31.0	41.5	49.5
- Optic fibre cable volume (mn fkm)	6.5	6.2	9.3	13.1	16.7
Revenue from Services (Rs mn)	4,613	5,401	6,996	11,700	14,420

Risks to Our View:

- Inadequate/delayed investments by telcos
- Delay in public projects like BharatNet and Smart Cities
- Increasing supply of preform and fiber which may put pressure on pricing

Key Triggers:

- Getting new smart city and other services projects
- Full order booking of the upcoming 20mn fkm OF capacity and increasing utilization for OFC

DCF Valuations & Assumptions

Rf	Beta	Ke	Term. Growth	Debt/IC in Term. Yr
6.8 %	1.2	14.0 %	5.0 %	46.6 %

	FY18E	FY19E	FY20-22E	FY23-27E	FY28-32E
Sales Growth	28 %	37 %	17 %	16 %	15 %
NOPAT Margin	12 %	12 %	11 %	11 %	11 %
IC Turnover	1.36	1.49	1.57	1.62	1.64
RoIC	16.9 %	19.7 %	18.8 %	19.1 %	19.2 %
Years of strong growth	1	2	5	10	15
Valuation as on date (Rs)	64	86	98	127	232
Valuation as of Mar'19	86	115	131	170	310

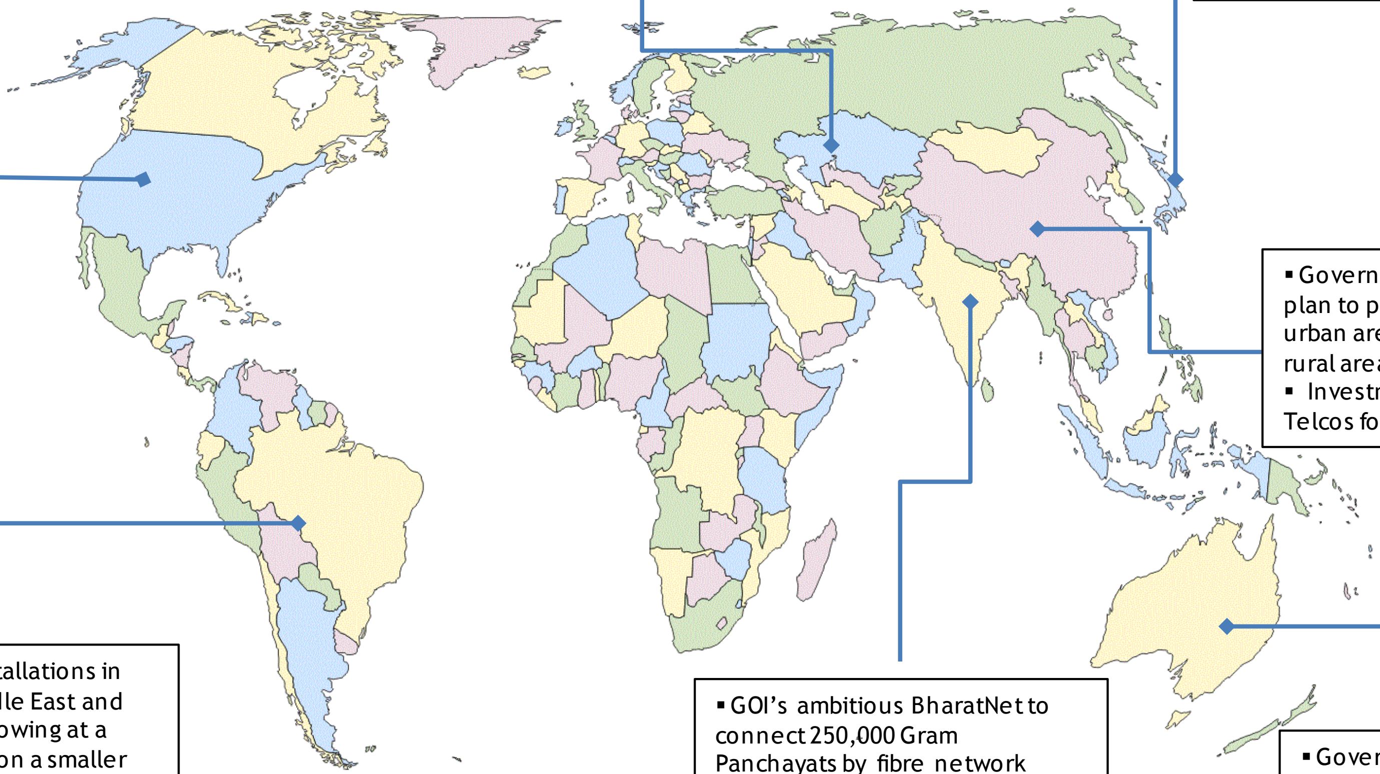
Based on DCF, we derive a 31st Mar'19 fair value of Rs. 310.

Company Description:

Sterlite Technologies is a pure play telecom products and services & software company, engaged in designing, building and managing smart digital networks. The company shares a common lineage with Vedanta Resources Plc – globally diversified natural resources major. It is the only vertically integrated player in India's optic fibre space, which gives it unique advantage over peers. SOTL's OF and OFC production capacities currently stand at 30mn fkm and 15mn fkm respectively (including 6.5mn fkm OF capacity in China).

Comparable valuation			Mkt Cap	Price	Target	EPS			P/E			BPS	P/B	RoE			Div Yield	
Company	Reco.	CMP	Rs. Mn.	Target	Date	FY17A	FY18E	FY19E	FY17A	FY18E	FY19E	FY17A	FY18E	FY17A	FY18E	FY19E	FY17A	FY18E
Sterlite Technologies Ltd	ADD	257	1,02,887	300	31st Mar'19	5.0	6.8	10.3	51.1	37.6	25.0	22.1	9.6	25 %	28 %	34 %	0.5 %	0.7 %
HFCL	NA	28	34,455	NA	NA	1.0	-	-	27.8	-	-	7.8	-	14 %	-	-	0.0 %	-
Vindhya Telelinks	NA	1,292	15,308	NA	NA	73.2	-	-	17.6	-	-	484.8	-	16 %	-	-	0.5 %	-

Exhibit 1: Governments and telcos around the world have started to invest heavily in next generation networks

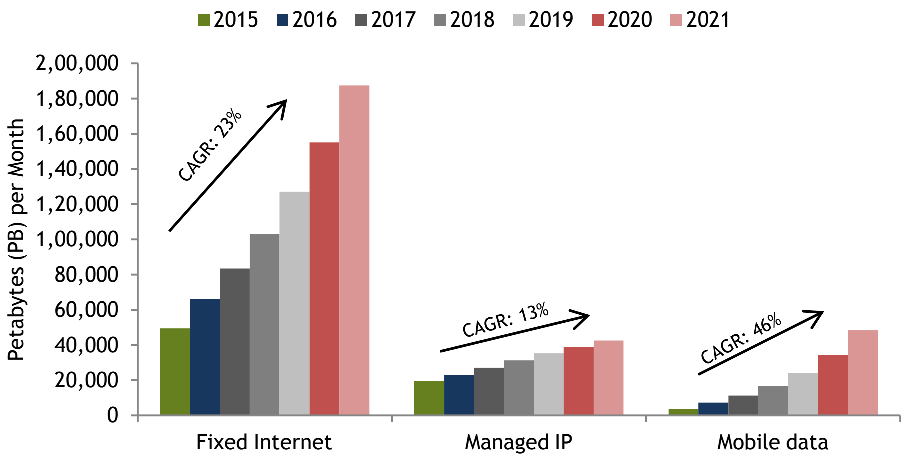


Source: Industry, Company, Equirus Securities

Ever growing global internet usage to scale new peaks

Industry experts suggest that prosperity of individuals and businesses will be closely linked to internet growth in the near future, which is especially true for developing nations like India. Governments around the world see broadband as the fourth utility alongside water, gas and electricity, and have announced heavy investments to provide high-speed internet to their population.

Exhibit 2: Global IP traffic projected to grow at ~24% CAGR over CY16-CY21

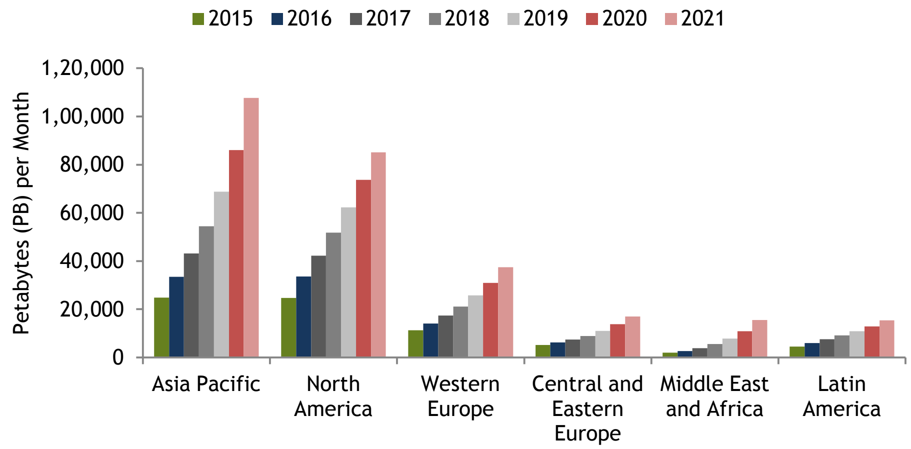


*Source: Cisco VNI, Equirus Securities, *1 PB equals to 1,000,000 GBs*

Growth in internet traffic has been led by developing countries till now. However, the next leg of growth is set to come from countries in APAC, the Middle East and Africa. IP traffic in the APAC region is projected to grow a ~26% CAGR over 2016-20. At the same time, its share in global traffic will improve from ~35% in 2016 to ~39% in 2021. Middle East and Africa's IP traffic is also estimated to grow sharply, at a CAGR of ~49% over this period, albeit off a lower base (**Exhibit 3**).

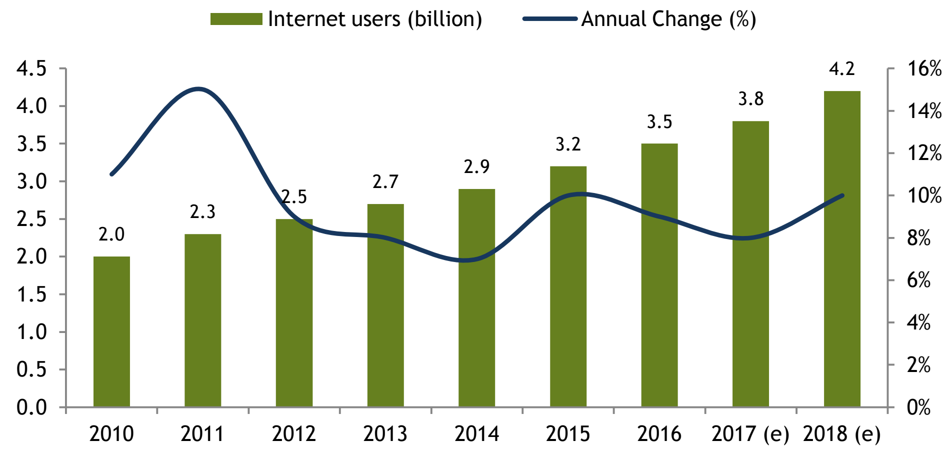
Although wireless technologies will see huge developments as most new subscribers in developing nations would be using mobile devices, the fixed broadband share is unlikely to decline as a lot of traffic would be offloaded to high-speed Wi-Fi networks (**Exhibit 5**).

Exhibit 3: Data traffic in Asia Pacific would be ~3x the current level in next 5 years



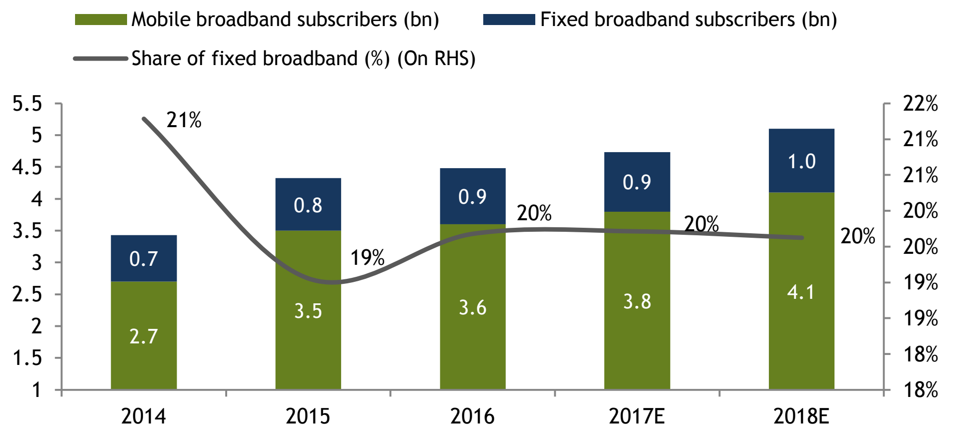
*Source: Cisco VNI, Equirus Securities, *1 PB equals to 1,000,000 GBs*

Exhibit 4: Global internet users to increase steadily on new additions in developing countries



Source: BuddeComm, Equirus Securities

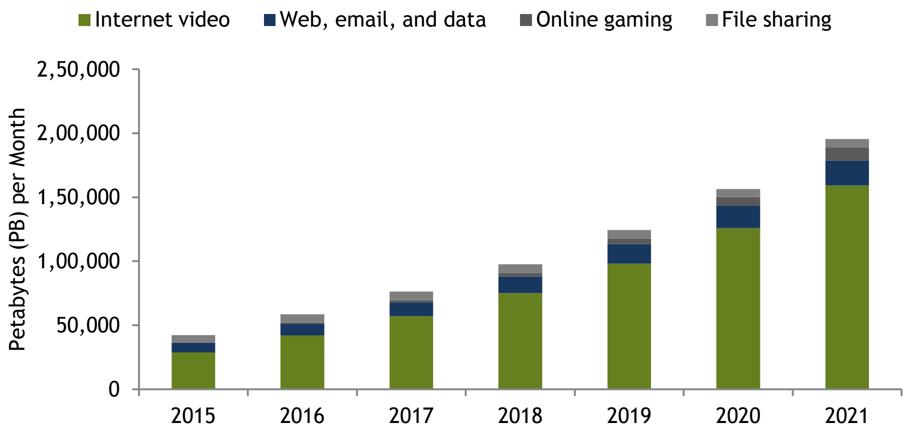
Exhibit 5: Share of fixed broadband internet subscribers to remain stable



Source: BuddeComm, Equirus Securities

Consumer internet traffic contributed ~81% to overall global IP traffic in 2016, and businesses the remaining ~19%. Internet video accounted for the largest chunk (~72%) of consumer internet traffic in 2016, and is expected to grow at a ~31% CAGR over CY16-CY20. According to Cisco VNI, every second, ~1mn minutes of video content would cross the internet by 2021, entailing huge investments in fixed infrastructure.

Exhibit 6: Internet video to drive consumer IP traffic over the next 5 years



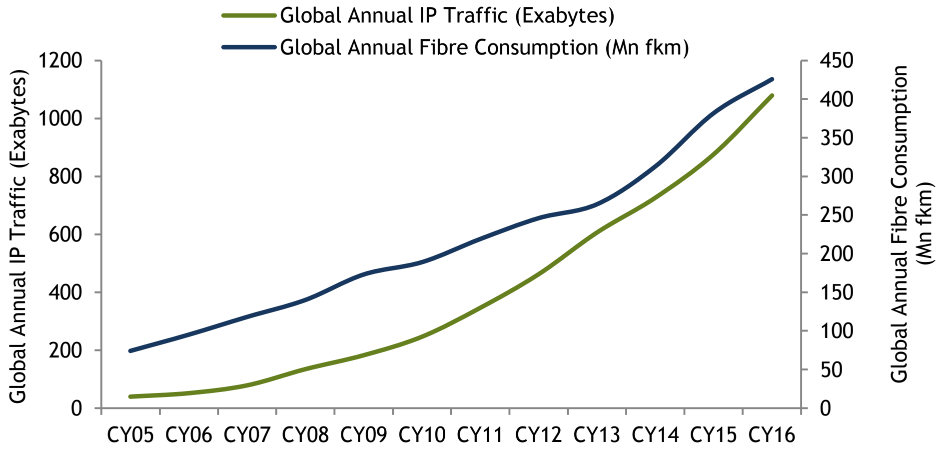
*Source: Cisco VNI, Equirus Securities, *1 PB equals to 1,000,000 GBs*

Optic fibre is the only medium that can support such massive data traffic

Copper networks across the world have got a lifeline by advances in the xDSL technology as of now. However, such networks are gradually reaching their limits because of rapidly increasing bandwidth demand by consumers. This has necessitated another wave of infrastructure investments into fixed-line networks, especially in developing nations. Developed nations such as USA, EU and Australia have already started investing heavily in fibre deployments to upgrade their existing networks.

Data traffic projections by Cisco and other agencies indicate that demand for fibre optic cables to carry such data is going to surge in the future. SOTL management predicts OFC demand of ~536mn fkm in 2020 in the base case and ~643mn fkm in the growth case. As per an Apr'16 International Telecom Union (ITU) report, more than ~US$ 144bn would be spent on deploying fibre infrastructure globally.

Exhibit 7: Global IP traffic drives fibre demand



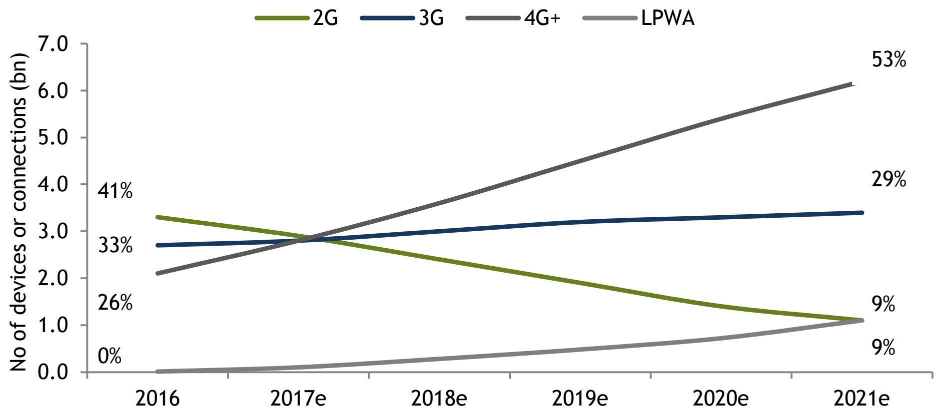
Source: Cisco, CRU, Company, Equirus Securities

The past 10 years have seen a ~36% CAGR in global IP traffic and ~17% CAGR in optic fibre deployment. As per an industry report, fibre consumption could have been higher in 2016 if it were not constrained by global supply shortage.

Penetration of 4G/LTE and 5G to drive growth in fibre networks

Most service providers globally are in the process of rolling out 4G services to meet increasing demand of faster connectivity and higher bandwidth. Cisco VNI estimates that global mobile 4G connections will grow from 2.1bn in 2016 to 6.1bn in 2021 (24% CAGR).

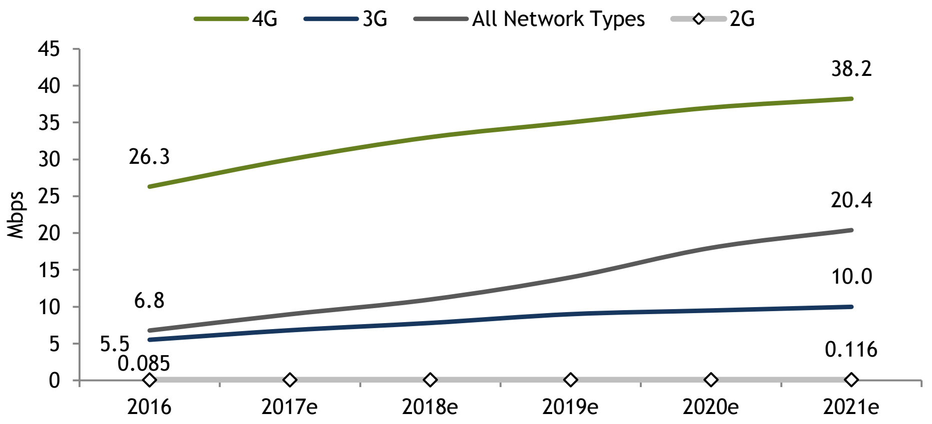
Exhibit 8: Share of global mobile 4G connections to increase rapidly



*Source: Cisco VNI Mobile, Equirus Securities, *% refers to devices and connections share*

Also, according to Cisco and Ookla, 4G networks would have double the speed of an average mobile connection by 2021 (**Exhibit 9**).

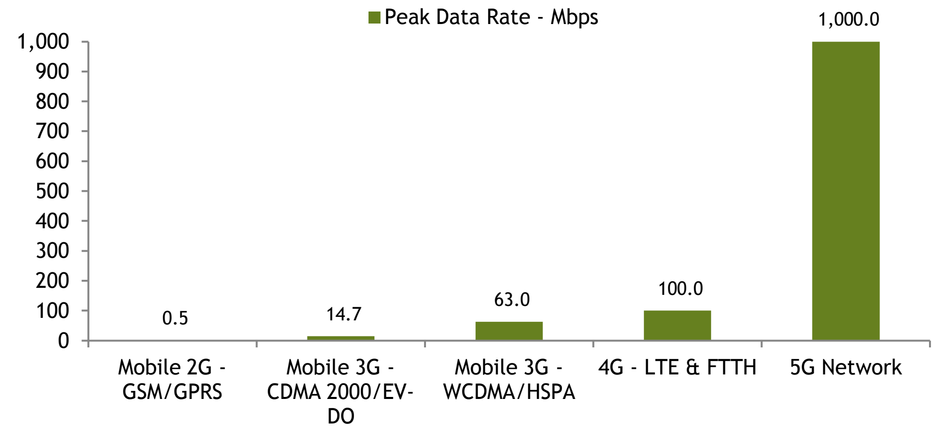
Exhibit 9: Internet speed to grow multifold for all network types



Source: Cisco VNI Mobile, 2017; Ookla Speedtest.net, Equirus Securities

Around the world, 5G developments have gained pace and would continue to be a key focus area for telcos in 2018 and 2019. Latency - the response time at which two devices begin communicating with each other - for 5G networks would be ~1 millisecond vs. ~50 milliseconds for 4G networks. Also, another key differentiation between 5G and 4G is the data rate - at least 1 Gb/sec for 5G vs. 100Mb/sec for 4G networks.

Exhibit 10: Peak data rates for an effective 5G service way higher than 4G/other technologies



Source: Qualcomm, CRU, Company, Equirus Securities

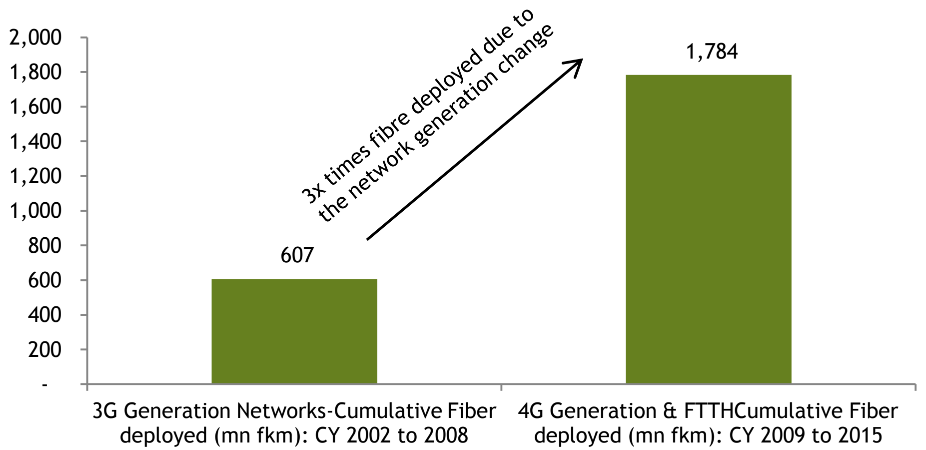
Cisco VNI estimates that 5G connections would come into existence in 2020 and grow over 1,000% within one year, from only ~2.3mn in 2020 to ~25mn in 2021. Also, as of now, 4G network generates ~4x data than the 3G network, whereas 5G is projected to generate ~7.7x data of an average 4G connection by 2021. Ultimately, most mobile towers will have to be connected to optic fibre to provide such high speeds and cope with the traffic volume generated. 5G would necessitate a multi-fold increase in mobile base stations and a majority of them would be required to be connected to optical fibre. In addition, these next generation networks would necessitate dense micro sites and small cells deployment, which would be connected through fibre backhaul.

Exhibit 11: All mobile towers required to be fibreised to realize 5G performance goals

	2G (Edge)	3G	4G LTE	5G
% of towers required to be fibreised	2-4%	15-18%	65-75%	100%

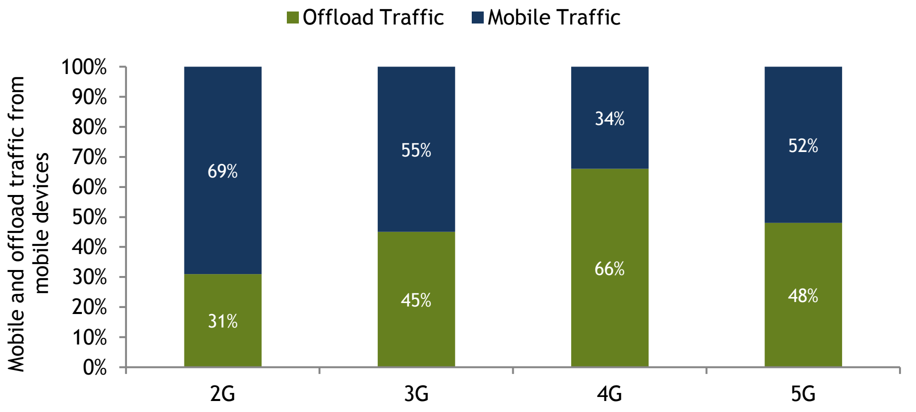
Source: Company, Market Estimates, Equirus Securities

Exhibit 12: Fibre deployment could grow multifold when the world transitions to 5G



Source: Qualcomm, CRU, Company, Equirus Securities

Exhibit 13: 63% of total mobile traffic will be offloaded by 2021



Source: Cisco VNI Mobile, Equirus Securities

Wireless and wireline networks to complement each other

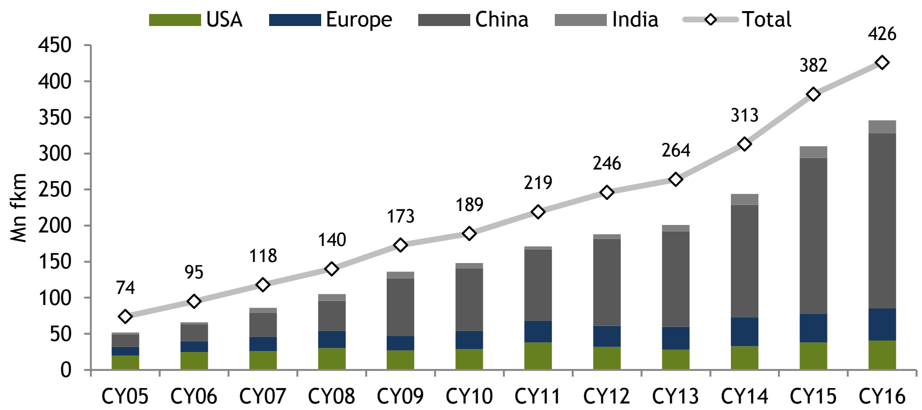
Recently, the data traffic handling capacity of mobile networks has improved significantly due to implementation of LTE technology and increased allocation of spectrum. However, it is not possible to handle ever-increasing volumes of data and a large part of it will have to be offloaded to wireline networks. Even with next generation of LTE (LTE-A and LTE-U), mobile subscribers will use Wi-Fi networks to download/stream heavy content such as videos.

As per industry estimates, by 2021, almost 63% of data consumption on wireless devices (smart phones, tablets and M2M devices) would happen over Wi-Fi networks as consumers would demand high-speed internet connectivity. Consumers would tend to offload internet traffic to Wi-Fi modems which are backed by fixed line networks. Rest 27% data consumption will happen over 2G/3G/4G/LTE networks, which in turn would culminate at telecom towers that have to be backhauled by fibre/copper networks. Therefore, both these technologies are viewed as complementing each other rather than competing against each other.

Global optic fibre industry in a growth phase

As per industry reports, world demand for OFC (end product) has grown ~14% CAGR during CY11-CY16, mainly led by China (~57% of global demand in CY16) and other developing nations. In India too, OFC demand has grown exponentially in the last 5 years (~35% CAGR) albeit off a very low base (**Exhibit 14**).

Exhibit 14: Global optic fibre cable demand has grown at ~14% CAGR in last 5 years



Source: Company, Equirus Securities

The demand pull has continued in 1HCY17 with both OFC and bare fibre demand growing by ~9% yoy. Growth drivers for different geographies are outlined below:

China: China's domestic market is poised for strong growth in the near future driven by 4G/5G and FTTH deployments by state-owned telecom players. China Mobile alone is expected to install >125mn fkm of OFC in the country this year (India's total OFC installation in CY16 was ~18mn fkm). However, China continues to face domestic preform shortage; therefore, Chinese players have been expanding preform capacities and reducing their import dependence. On the OF and OFC front, China gradually is becoming a net exporter as several Chinese players like YOFC, Hangzhou Electric, and ZTT are in the process of expanding their capacities.

Also, the Chinese government's Broadband China Plan is aimed at providing broadband access with a speed of at least 50Mbps in urban areas and 12Mbps in rural areas by 2020.

USA: The market's top 3 OF and OFS suppliers, viz. Corning, OFS and Prysmian, are heavily investing in building new capacities driven by a strong demand outlook in the US. USA's mobile operators are exploring new business cases for 5G and IoT whereas CATV MSOs have been laying out FTTH networks. New data centres in metro areas are also fuelling growth of high-speed data networks. Fibre investment of ~US$ 130bn-US$ 150bn is expected over the next 5-7 years.

Australia: The Australian government aims to build fibre-to-the-premises network, which will connect ~93% of the country's commercial and residential buildings. Also, under the aegis of Mobile Black Spot Program, the Australian government will be improving mobile coverage in remote parts of the continent. This program would see investments worth US$ 600mn over the years.

Europe 2025: The European Commission has set bold targets to create a Gigabit society (1 Gbps internet speed) for public services providers and digitally-intensive organizations. It is also aimed at providing 100Mbps speed to all urban and rural homes and 5G coverage to all urban areas.

Spain has been putting special emphasis on FTTH rollouts, with all major telcos working closely to build a nationwide FTTH network. Also, Telcos in Italy, Portugal and Germany have been investing significantly in FTTX initiatives.

Exhibit 15: World optical fibre market has grown by ~9% in 1HCY17; India a net exporter of optical fibre

	2015			% Change	2016					% Change	2017		% Change
'000 fibre-km	**Q3**	**Q4**	**CY15**	**14-15**	**Q1**	**Q2**	**Q3**	**Q4**	**CY16**	**15-16**	**Q1**	**Q2**	**1H16-1H17**
Shipments													
North America	12,531	12,040	49,141	3%	12,544	13,390	14,210	14,510	54,655	11%	14,006	14,602	10%
Europe	6,016	6,126	23,691	5%	6,210	6,528	6,792	6,943	26,473	12%	6,738	6,995	8%
China	64,318	65,604	2,57,272	33%	71,146	72,598	72,598	74,050	2,90,391	13%	78,060	79,653	10%
Other Asia-Pac.	20,776	20,271	80,476	13%	20,553	21,718	22,214	21,873	86,357	7%	21,622	23,125	6%
- India	7,927	7,775	30,489	19%	8,274	8,619	8,792	8,792	34,477	13%	9,144	9,525	11%
Rest of World	753	691	3,383	-20%	820	771	771	771	3,133	-7%	945	892	15%
World Total	**1,04,394**	**1,04,733**	**4,13,963**	**22%**	**1,11,273**	**1,15,005**	**1,16,585**	**1,18,148**	**4,61,011**	**11%**	**1,21,371**	**1,25,267**	**9%**

Demand													
North America	11,505	11,417	45,518	12%	11,779	12,584	13,373	13,726	51,462	13%	13,513	14,077	13%
Europe	11,953	10,911	45,584	4%	11,370	12,069	12,676	12,444	48,560	7%	11,625	12,695	4%
China	63,110	63,270	2,50,588	34%	69,762	70,744	70,744	71,603	2,82,853	13%	74,198	75,756	7%
Other Asia-Pac.	13,766	14,298	56,012	9%	15,320	15,247	15,082	15,788	61,437	10%	17,104	17,296	13%
- India	5,065	5,448	21,230	20%	6,542	6,466	6,067	6,611	25,686	21%	7,833	7,742	20%
Rest of World	4,061	4,266	16,262	-3%	4,210	4,085	4,197	4,207	16,699	3%	5,062	5,312	25%
World Total	**1,04,396**	**1,04,162**	**4,13,963**	**22%**	**1,12,441**	**1,14,730**	**1,16,071**	**1,17,768**	**4,61,011**	**11%**	**1,21,502**	**1,25,136**	**9%**

Source: CRU International, Equirus Securities

Exhibit 16: World optical fibre cable market has grown by ~9% in 1HCY17; India a net exporter of optical fibre cables

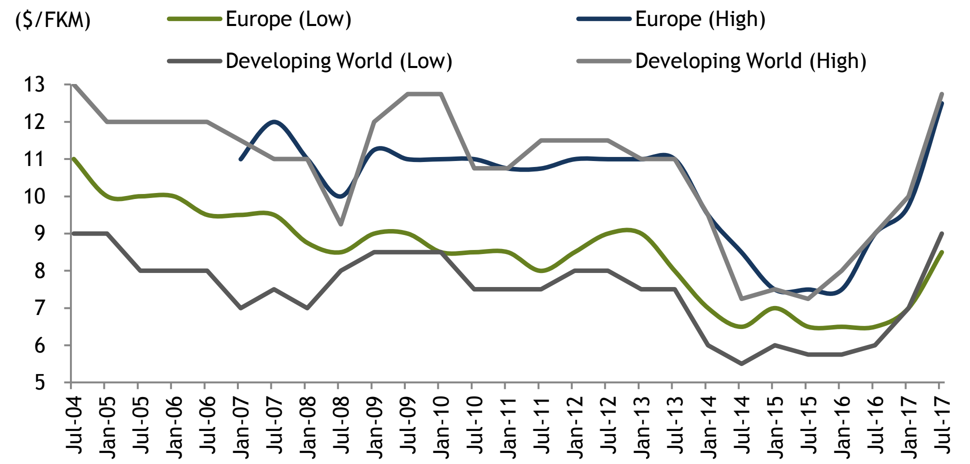
	2015		% Change		2016				% Change		2017		% Change
'000 fibre-km	**Q3**	**Q4**	**CY15**	**14-15**	**Q1**	**Q2**	**Q3**	**Q4**	**CY16**	**15-16**	**Q1**	**Q2**	**1H16-1H17**
Shipments													
North America	10,578	10,618	42,210	12%	10,934	11,704	12,437	12,786	47,860	13%	12,567	13,092	13%
Europe	11,125	10,243	42,702	4%	10,514	11,163	11,730	11,505	44,912	5%	10,880	11,636	4%
China	58,245	58,534	2,31,678	35%	64,535	65,447	65,447	65,317	2,60,747	13%	68,901	69,875	7%
Other Asia-Pac.	12,481	13,029	50,743	10%	14,120	14,052	13,898	14,554	56,623	12%	16,127	16,067	14%
- India	4,649	5,066	19,683	20%	6,084	6,013	5,642	6,149	23,888	21%	7,285	7,200	20%
Rest of World	3,810	4,031	15,347	-3%	3,807	3,863	3,966	3,976	15,612	2%	4,732	4,727	23%
World Total	**96,238**	**96,455**	**3,82,681**	**23%**	**1,03,909**	**1,06,228**	**1,07,478**	**1,08,138**	**4,25,753**	**11%**	**1,13,207**	**1,15,398**	**9%**
Demand													
North America	11,578	11,569	45,829	14%	11,403	12,337	13,100	13,398	50,239	10%	13,182	13,880	14%
Europe	10,993	10,522	41,606	5%	11,017	11,126	11,930	11,270	45,343	9%	11,926	12,089	8%
China	54,113	54,386	2,15,372	36%	59,910	60,765	60,765	60,648	2,42,088	12%	64,296	65,518	8%
Other Asia-Pac.	11,381	11,973	46,392	3%	12,856	12,968	12,712	13,471	52,007	12%	14,026	14,174	9%
- India	3,830	4,174	16,215	5%	4,513	4,460	4,185	4,561	17,720	9%	5,198	5,138	15%
Rest of World	8,387	8,768	33,482	9%	8,706	8,989	9,235	9,147	36,077	8%	9,625	9,889	10%
World Total	**96,452**	**97,219**	**3,82,681**	**22%**	**1,03,893**	**1,06,184**	**1,07,744**	**1,07,934**	**4,25,753**	**11%**	**1,13,055**	**1,15,550**	**9%**

Source: CRU International, Equirus Securities

Optic fibre prices have moved up in CY17 to attain highest level since CY04

As per Optical Fibre and Cable Monitor, 2017, global fibre shortage has continued into 1HCY17. New preform capacity at several locations in the world has not been able to outpace fibre demand growth. Spot prices as high as US$12.5/fkm and contract prices as high as US$9.5/fkm have been recorded recently (**Exhibit 17**).

Exhibit 17: Currently spot optic fibre prices are at a 10 year high



Source: CRU International, Equirus Securities

Industry expects fibre prices to remain stable going ahead despite the fact that most major players are involved in setting up new preform capacities to match the demand. We have highlighted in the Exhibit below that if we assume 10% CAGR growth in optical fibre cable demand in the next 2 years, we will be requiring ~515mn fkm OFC by CY18E. If we assume a yield factor of 93% (remaining 7% is generally loss of fiber during cable production), we will be requiring ~557mn fkm OF by CY18E. Given that the additional preform capacity coming up in the next 2 years is only ~2,500 tonnes, we estimate that there may be still a shortage of fiber by ~20%.

Exhibit 18: Global optic fibre prices will remain stable as new OF demand will still outpace corresponding addition in preform capacity

	CY16		
Preform consumption (tones)	14,250		
Optic Fibre production (mn fkm)	461		
Preform consumption (tones)/mn fkm	31		
OF fkm produced with 1kg of preform	32		
Yield factor	93%		
Optic Fibre Cable production (mn fkm)	426		
(assuming 10% growth in both OF and OFC demand)	**CY16**	**CY17e**	**CY18e**
Global Optic Fibre Cable demand (mn fkm)	426	469	515
Global Optic Fibre demand (mn fkm)	461	507	557
New OF demand coming up in next 2 years (mn fkm)			**97**
Additional preform capacity coming up in next 2 years (tonnes)			2,500
- OF volume it will be able to support (mn fkm)			**81**
OF shortage (Demand exceeds supply) of:			**20%**

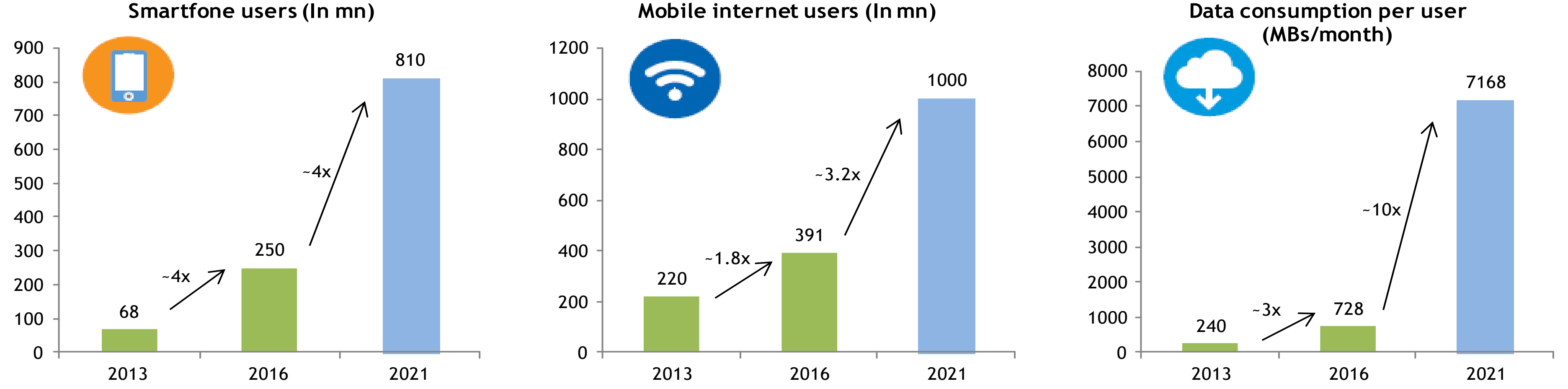
Source: Industry, Equirus Securities

Indonesia emerging as a new production hub for supply to South East Asian countries

As major Chinese fibre players have catered to rising demand in the region, they are now targeting other geographies as well. Among other Chinese players, Yangtze Optical Fibre Corporation (YOFC) and Jiangsu Zhongtian Technologies (ZTT) have announced investments in setting up Optical Fibre Cable plants in Indonesia. Indonesia would act as a hub for supplying final products to South East Asian countries. Also, new capacities would cater to Indonesia's own requirements for the National Broadband Plan.

Indian optic fibre industry - Key growth drivers ahead

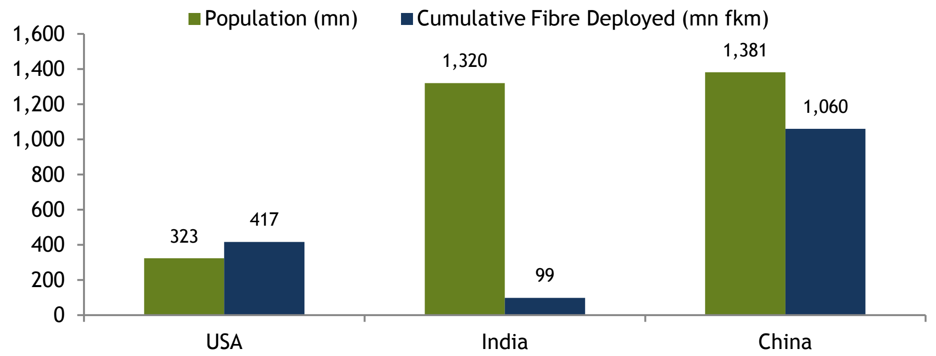
Exhibit 19: India stands at a data inflection point



Source: Ericsson, BCG, GSMA, Live Mint, Company, Equirus Securities

India has one of the lowest cumulative fibre deployed/population ratios in the world. While it stood at ~1.3x/~0.8x for USA/China, it was at a meager ~0.1x for India in May'16.

Exhibit 20: India's cumulative fibre deployed/population ratio is very low



Source: Company, Equirus Securities

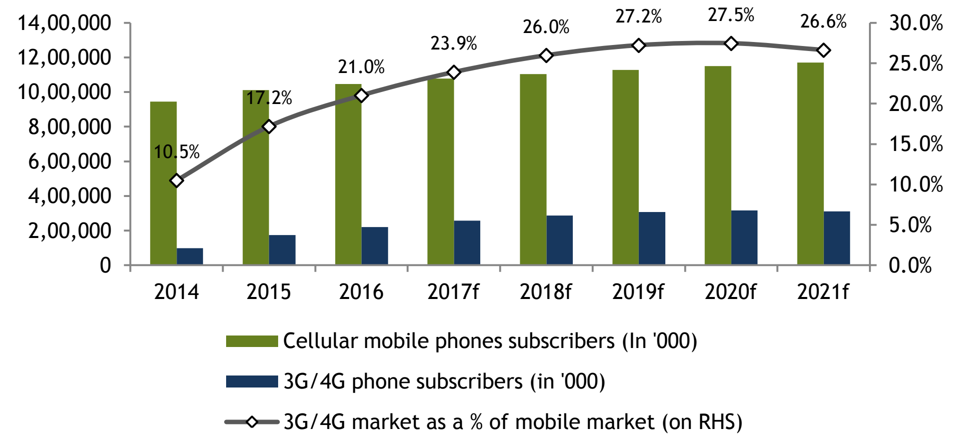
In our opinion, below are the factors that will drive the Indian optical fibre industry:

1. Mobile data broadband infrastructure required by telcos for LTE/4G/5G

In most developed countries, ~70-80% of mobile towers are linked with optic fibre networks; in comparison, India only has 15-20% of towers fibre-connected. In India, exploding data traffic should drive the tower industry as more number of 3G/LTE/4G sites would be required to be fibre-connected. Further, telcos would look to plug gaps in their coverage and add more sites across the country.

In the Indian mobile market, the share of 3G/4G subscribers has been increasing at a faster pace after the entry of RJio. RJio has also propelled incumbents Bharti Airtel, Vodafone and Idea to rapidly roll out 4G services. As voice penetration in India has reached ~80%, the next wave of growth would come from increasing data subscribers.

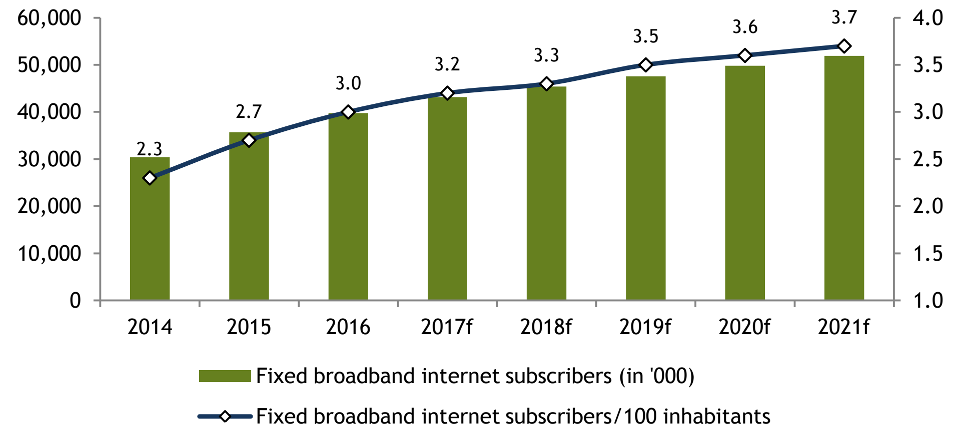
Exhibit 21: Share of 3G/4G subscribers to rise in India's mobile market



Source: BMI, operators, TRAI, COAI, DoT; Equirus Securities

At 2016-end, there were ~39.8mn broadband connections in India, which should rise to ~51.9mn by 2021 as incrementally higher traffic would be offloaded to fixed broadband networks for higher bandwidth requirements.

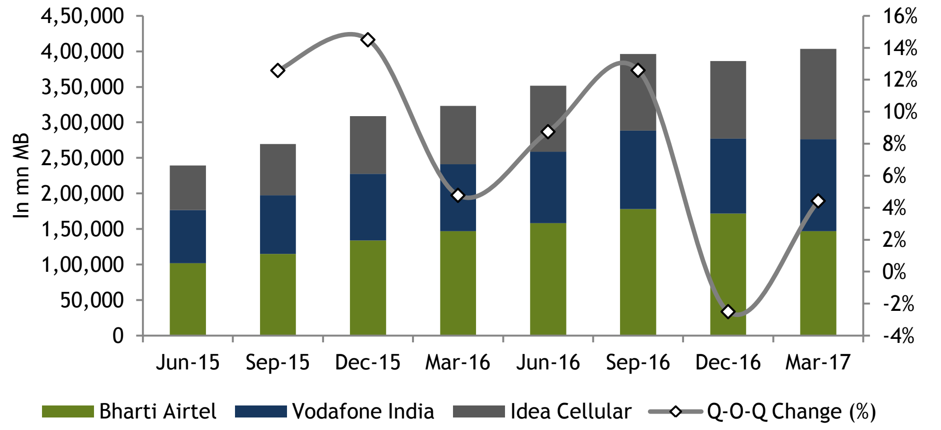
Exhibit 22: Broadband internet subscribers/capita is expected to improve steadily



Source: BMI, operators, TRAI, COAI, DoT; Equirus Securities

Data usage on the networks of top-3 telcos has increased to ~403bn Mb in Mar'17 from just ~205bn Mb in Mar'15 (~40% CAGR in 2 years). While there was a slight dip in data usage during the Oct-Dec'16 quarter due to the entry of RJio, data volumes for incumbent telcos have been improving since then; RJio's entry has benefitted data market immensely as it has pushed up the data appetite of consumers.

Exhibit 23: Data traffic on telcos networks has been rapidly increasing



Source: BMI, Company; Equirus Securities

Given the insatiable data demand of consumers and stiff competition in the industry, most telcos have initiated investments in backhaul networks - the major demand driver likely for optic fibre cables in India.

Mr. Nilanjan Roy, Global CFO of Bharti Airtel: "Our current year capex spend (FY17) is shy of $3bn across both geographies (India and Africa). In order to create additional data capacities in light of increased data usage in the country, and to grow both coverage and capacity along with keeping a close watch on capex efficiency and productivity, our capex guidance for FY18 stands similar to FY17 spends at ~$3bn. It will be roughly ~$2.5bn in India and ~$0.5bn in Africa". Airtel's 1QFY18 India capex stood at ~Rs. 62bn.

Mr. Himanshu Kapania, Managing Director of Idea Cellular: "The capex guidance for FY18 is Rs. 60bn, an investment earmarked for expanding broadband coverage, increase wireless data capacity with planned launch of 2300 MHz spectrum network and introduction of Voice services on VOLTE etc". Idea's 1QFY18 capex stood at ~Rs. 11.7bn but the Company has maintained the full year guidance of Rs. 60bn.

2. Rural broadband initiatives like BharatNet by the government

There is great need for providing rural India with adequate broadband infrastructure as most of the existing infrastructure is concentrated in urban and semi-urban parts of the country. This has created a digital divide in the country.

Under the National Telecom Policy (NTP), 2012, the government had launched National Optic Fibre Network (NOFN) program in 2011. The idea was to connect 250,000 Gram Panchayats (GPs) through optic fibre cables and ensure at least 100Mbps speed at the village council. It is envisaged that non-discriminatory access to this network shall be provided to telecom service providers, cable TV operators and other content providers.

A special purpose vehicle, Bharat Broadband Network Ltd (BBNL), has been formed for overseeing the project, while BSNL, RailTel and Power Grid Corporation have been appointed for execution of the project. However, the project did not take off as expected with implementation lagging the targets. A new target of connecting 50,000 GPs by Mar'15 was set in place of the earlier target of 100,000 GPs by Mar'14. However, executing agencies failed to meet that target by a huge margin.

Based on the experiences of NOFN, an updated version – BharatNet – was conceived. It is supposed to provide connectivity to all 250,000 GPs using an optimal mix of underground fibre, fibre over power lines, and radio and satellite media by Mar'19. It would use the existing fibre network of PSUs (BSNL, RailTel and PGCIL) and lay down incremental fibre cables wherever required. The total cost of the project is estimated to be ~Rs 421bn. Once connected through the OFC network, various services such as e-governance, e-education and e-healthcare would be delivered to GPs.

Exhibit 24: Current status of BharatNet as on 8th Oct'17

Description of Work	Status
OFC Pipe laid	2,47,025 Kms (1,09,519 GPs)
Optical Fibre laid	2,32,941 Kms (1,02,405 GPs)
Tenders Finalized	3332 Blocks / 1,24,669 GPs
Work Started*	3256 Blocks / 1,21,467 GPs
Current Weekly performance of Optical Fibre laying	1772 Kms
Current Weekly performance of OFC Pipe laying	732 Kms
Optical Fibre Cable Delivered on site	3,04,892 Kms
GPON Integrated & Tested (Lit)	57,326 GPs

*Source: BBNL, Equirus Securities, *does not include the data of Andhra Pradesh*

SOTL has been an integral part of the BharatNet program and has supplied OFCs to implementing agencies. The government has recently announced that role of private players would be enhanced further and there could be an opportunity to do the network integration as well. This augurs well for SOTL as, over the years, it has developed such capacities by participating in projects such as NFS and Smart Cities.

3. Broadband infrastructure for Smart Cities, Defense and other utilities

Network for Spectrum (NFS)

BSNL has been building an alternative defense network using optical fibre cables and satellite links for exclusive use by armed forces. In turn, defense wings would surrender 150MHz of telecom spectrum in critical bands.

Smart Cities

The Indian Government's Smart Cities Mission entails creating 100 smart cities to improve the quality of life and to manage massive urbanization efficiently. The mission will see the optimal use of city's infrastructure assets by extensive use of technology. Next generation communication infrastructure which would be built on the OFC network has become the backbone of the entire project. As on Jun'17, 90 smart cities of the planned 100 cities have been selected. Total cost of the project is estimated to be ~Rs 1,893bn.

Exhibit 25: Proposed Smart Solutions to drive economic growth and quality of life

E-Governance and Citizen Services
- Public Information
- Electronic Service Delivery
- Citizen Engagement
- Video Crime Monitoring

Waste Management
- Waste Energy & Fuel
- Waste to Compost
- Waste Water to be Treated
- Recycling and Reduction of Waste

Water Management
- Smart Meters & Management
- Leakage Identification, Preventive Maintenance
- Water Quality Monitoring

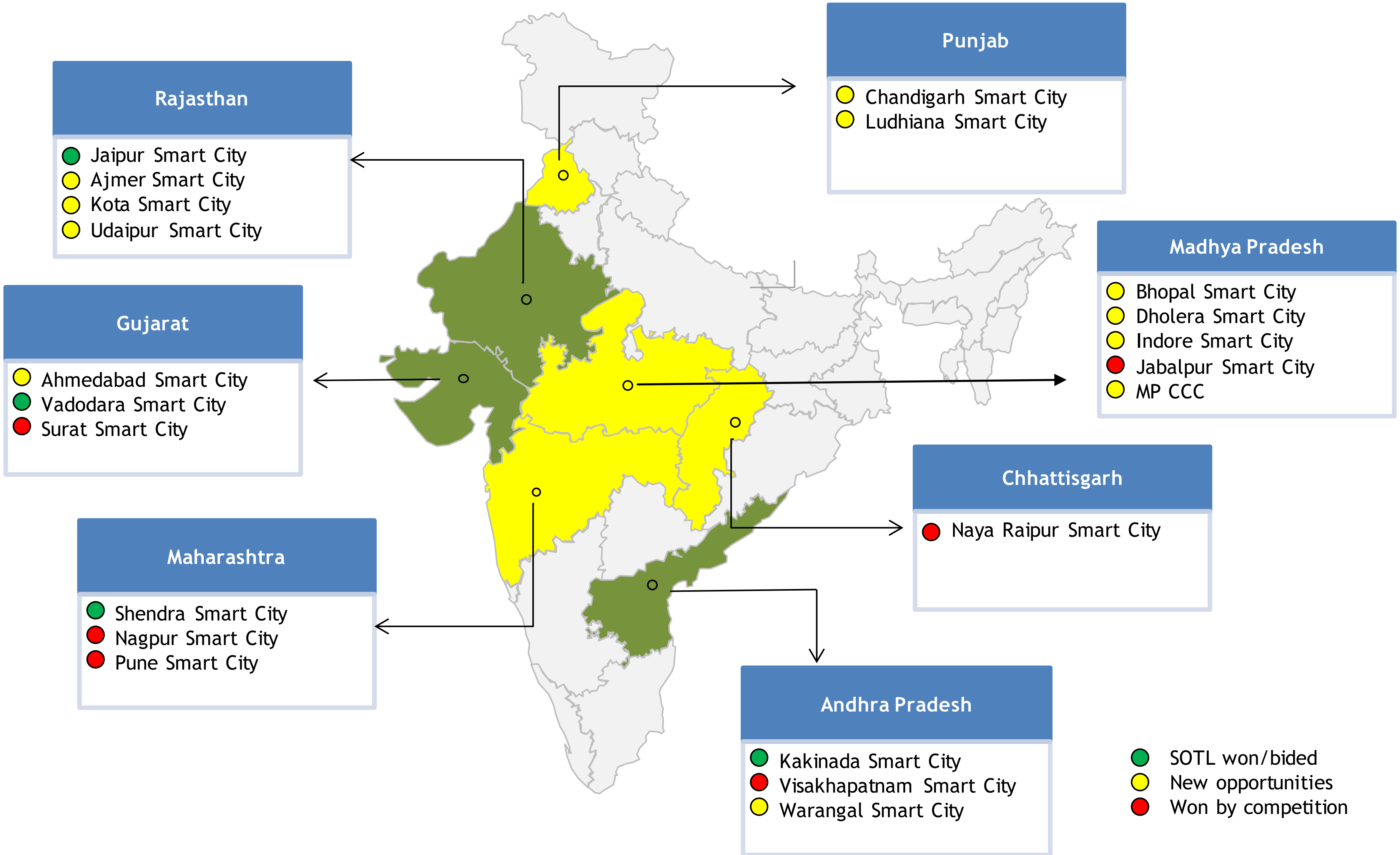
Urban Mobility
- Smart Parking
- Intelligent Traffic Management
- Integrated Multi-mode Transport

Energy Management
- Smart Meters
- Renewable Sources of Energy
- Energy Efficient & Green Buildings

Others
- Tele-medicine & Tele-education
- Incubation/Trade Facilitation Centers
- Skill Development Centers

*Source: Government of India, Equirus Securities; *Blue colored points indicate project opportunity for players like SOTL*

Exhibit 26: Smart Cities projects pipeline suggests that many new opportunities could come in Sterlite's way

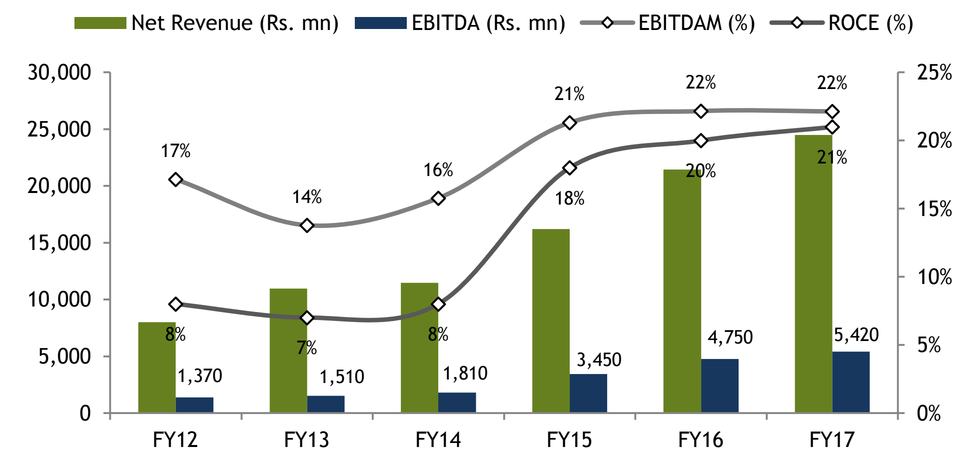


Source: Company, Equirus Securities

Sterlite Technologies: Key beneficiary of increasing fibre penetration in India

SOTL has grown its telecom revenues at a ~25% CAGR over FY12-FY17 helped by increasing volumes for both OF and OFC, and foray into services & software divisions. OF volume has improved from 11.7mn fkm in FY12 to 20.1mn fkm in FY16. At the same time, OFC volumes have increased from 3.7mn fkm to 6.5mn fkm. During FY12-FY17, absolute EBITDA grew at a ~32% CAGR with EBITDA margin expansion of ~500bps in the same period. Margin improvement was driven by operating leverage coming from higher volumes and realizations, especially on the OF front, due to global supply shortage. ROCE too jumped from 8% to 21% in just five years.

Exhibit 27: Marked improvement in overall financial profile in past five years

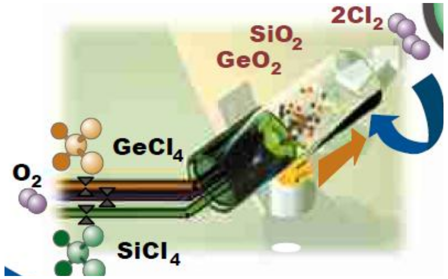


*Source: Company, Equirus Research, *Figure represents telecom business only*

The journey so far…

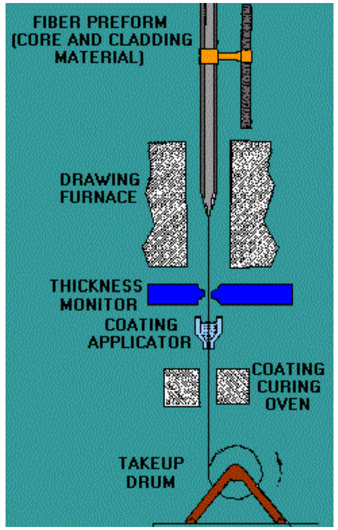
- **Fully integrated fibre value chain:** SOTL's OF production capacity stands at 30mn fkm currently at the end of 2QFY18. Management has announced OF capacity expansion to 50mn fkm from 30mn fkm by Jun'19. This would entail a capex of ~Rs 10bn-12bn and make it the third-largest OF producer in the world.

Exhibit 28: Optical Fibre Manufacturing Process



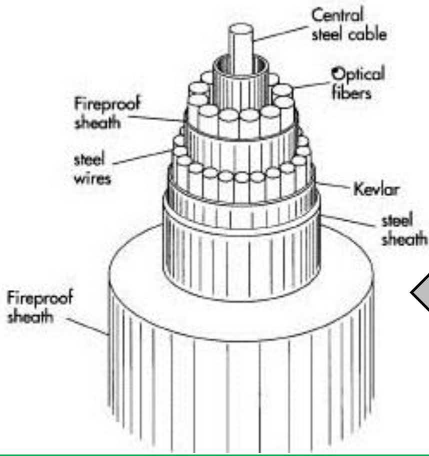
Step 1: Making preform

Raw materials used in this step are $SiCl_4$, $GeCl_4$, and gases such as O_2, H, Cl_2 and SF_6. Preform (glass) – core and cladding of Optic Fibre - is made using the Chemical Vapor Disposition (CVD) process.



Step 2: Drawing OF

System consists of a furnace to melt the end of the preform, sensors that monitor the diameter of the OF being pulled and coating devices to apply protective coating over outside cladding.



Step 3: Cabling OF to make OFC

Several OFs are placed around a central steel cable to make an OFC. Depending on the harshness of the environment where the cable would be located, different protective layers are applied.

Source: Industry, Equirus Securities

Also, during 2016, the company expanded its OFC capacity from 8mn fkm to 15mn fkm. Cabling mix (proportion of OF produced, cabled by SOTL itself) stood at only ~32%/~24% in FY16/FY17E. As OFC provides an opportunity to earn extra margins on top of OF margins, SOTL aims to increase cabling mix significantly over the next 2-3 years.

In 2013, SOTL formed a JV - Jiangsu Sterlite Tongguang Fiber Co. Ltd. (JSTFCL) – with Jiangsu Tongguang Communication Co. Ltd. (TGCl) to produce optical fibre in China to cater to the market's growing demand. JSTFCL invested US$ 25mn to set up a green-field facility with an annual capacity of 5mn fkm in China's Jiangsu Province. It commenced commercial production in Feb'13. SOTL supplies fibre performs (glass) to this facility from India. Production volume at this facility has increased at a ~36% CAGR over FY14-FY17E to reach ~6mn fkm in FY17E.

- **Successful foray into services business**

In Jul'14, SOTL secured an order from BSNL for end-to-end deployment of 9,495km of OFC in J&K, including design, engineering, implementation and maintenance as a part of the NFS project. The contract also involved the supply of OFC to other regions of the country. Total value of the contract was ~Rs 19.5bn, to be executed by CY16-end. However, due to geopolitical tensions in J&K, work was pushed back to FY17-end, and is currently under execution. Additionally, the NFS contract includes Rs 5bn AMC spread over seven years once the implementation part is over.

SOTL has been and will continue to be a valuable partner to the Government in fulfilling the Smart Cities Mission. The company has executed three Smart City projects (Jaipur, Ahmedabad and Gandhinagar) till date, with total value at ~Rs 700mn-800mn. Work on these projects would include deployment of CCTV, surveillance cameras, and Wi-Fi hotspots, and setting up control rooms to monitor overall functioning of systems. SOTL would also look at managing these cities for the next 6-7 years. The company has recently won the Kakinada Smart City Project worth ~Rs 1bn-1.1bn. Management has indicated that having tested their capabilities, the company would only look at higher-value projects of at least ~Rs 2bn-3bn. Having already proven its capabilities in implementation and management of smart cities, SOTL should be able to garner significant share in the total opportunity size of ~Rs 1,893bn.

Moreover, telcos are looking for players who can provide end-to-end network integration solutions, including OFC network design, OLT equipment deployment, network rollout and management over the years. SOTL has started building traction with telcos to participate in such opportunities. The company is currently rolling out the Jio network in Madhya Pradesh and also doing such pilot projects for Airtel in the state.

- **Acquisition of Elitecore to expand into OSS/BSS**

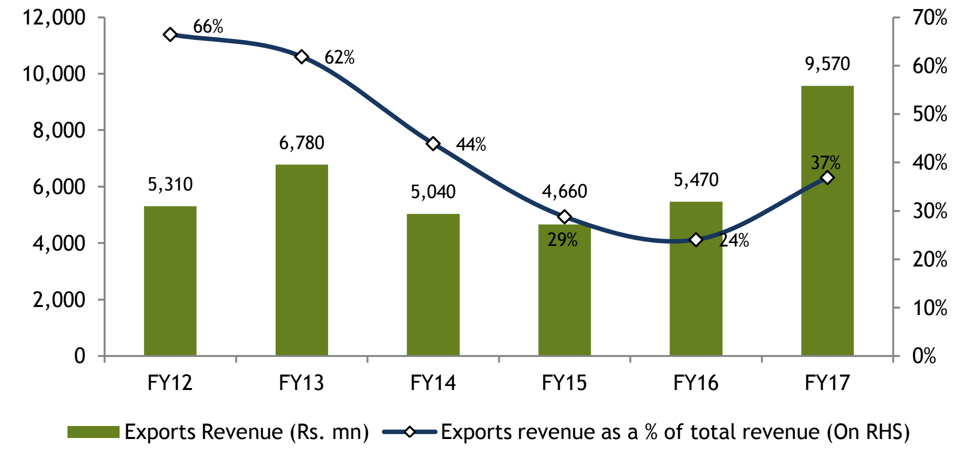
In Sep'15, SOTL acquired Elitecore Technologies, a global telecom software provider, from First Carlyle Ventures Mauritius and other shareholders for a total purchase consideration of ~Rs 1.87bn. Post the acquisition, Elitecore was merged with the SOTL standalone entity with the appointed date of 29 Sep'15; the company started contributing to revenues from 3QFY16.

With this acquisition, SOTL has been able to broaden service offerings to its global customers. Elitecore provides software solutions for operations support, business support and revenue management.

Elitecore has served 52 service providers in 40+ countries. Its pre-integrated platform can monetize IP networks, including 3G/4G/LTE, Wi-Fi, xDSL and FTTH. It has created new revenue opportunities for telcos by delivering superior customer experience. Elitecore's centralized product catalogue enables telcos deliver services like shared wallet, sponsored data, tiered FUP, pay-per-use, push notifications, bundled Wi-Fi + LTE, VoLTE, and turbo boost. In FY17, Elitecore's software division enabled the largest LTE network rollout for VoLTE services for a leading Malaysian operator, YTL.

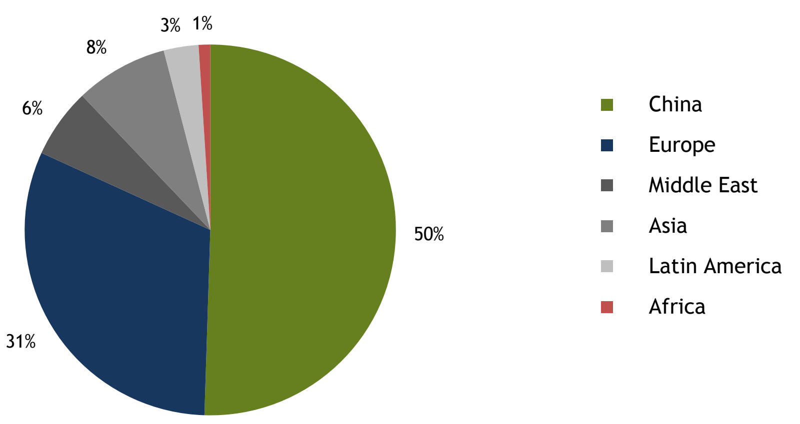
With silicon to software capabilities that span across Products (OF and OFC), Services (network and system integration) and Software (OSS and BSS), SOTL is in a unique position to capture ~10-15% of the Information and Communications Technology capex (vs. 1-2% capex earlier with only product offerings).

Exhibit 29: SOTL's export revenue constitutes a significant pie of overall revenue



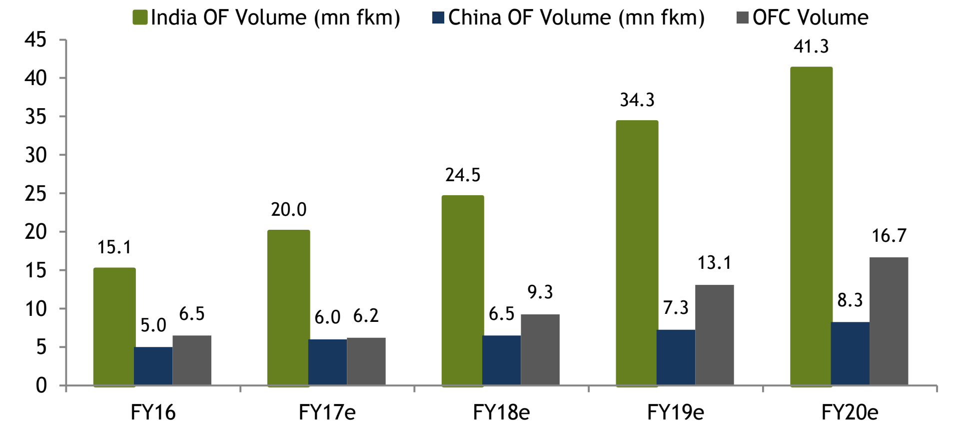
Source: Company, Equirus Securities

Exhibit 30: SOTL, well penetrated in China and Europe, aims to diversify into new geographies



Source: Company, Equirus Securities

Exhibit 31: OF/OFC volume growth to be led by capacity expansion/higher utilization



Source: Company, Equirus Securities

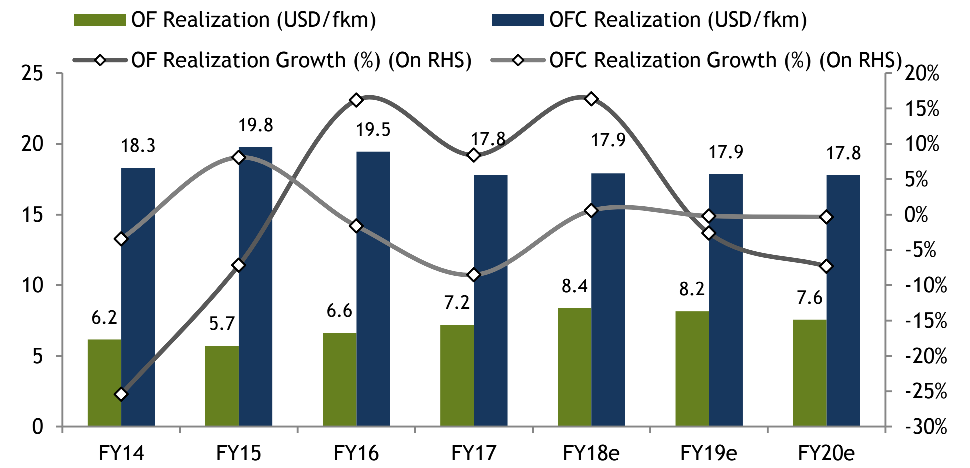
As global OF supply shortage continues, we expect OF realizations to slightly inch up from current levels in the near future but decline going ahead as all major players are expanding capacities. Overall, we build in a modest ~2% CAGR in OF realizations over FY17-FY20E. OFC will continue to be more of a commodity product and therefore we do not expect it to fetch significantly higher realizations from current levels; hence, we not build in any realization growth for OFC.

Overall financial profile to improve over FY17-FY20E

Product business gross revenue to grow at ~24% CAGR on higher volumes

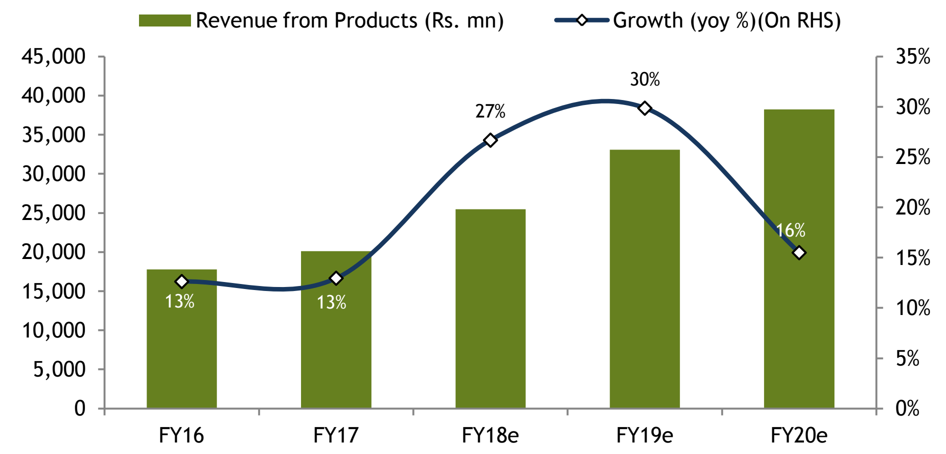
SOTL aims to expand OF capacity to 50mn fkm from 30mn fkm by Jun'19. As the only player in India to have large-scale OF drawing capabilities, the company has always been able to fully utilize OF capacity in the past. Also, management has indicated that production orders till next year end have already been booked. We believe SOTL would be able to utilize almost 100% of its new OF capacity as soon as it is on board. On the OFC front, the company would gradually improve capacity utilization levels to ~100% by FY19 from FY17E levels of ~41% and current levels of ~60-65%. Given the run rate, we expect that SOTL would do further OFC capacity expansion in FY20E. Overall, we estimate OF/OFC volumes to grow at a CAGR of ~24%/~39% over FY17-FY20E.

Exhibit 32: Realizations projected to remain stable over FY17-FY20E



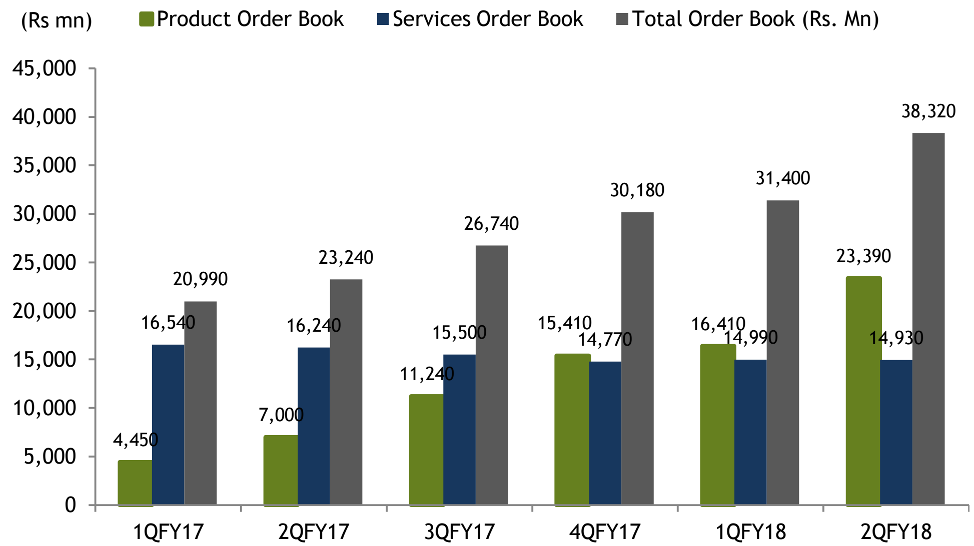
Source: Company, Equirus Securities

Exhibit 33: Gross revenue from products to grow at a ~24% CAGR over FY17-FY20E



Source: Company, Equirus Securities

Exhibit 34: Order book has been increasing with rising contribution from Services



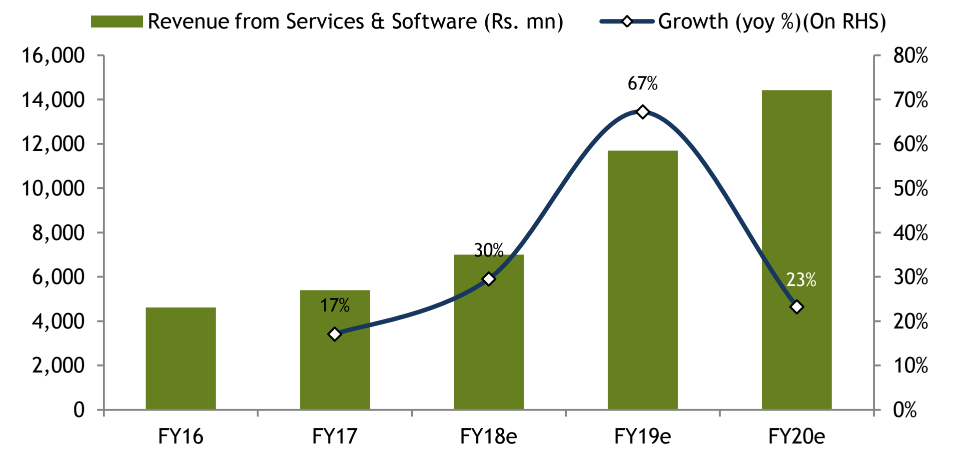
Source: Company, Equirus Securities

Services business gross revenues to increase at a ~39% CAGR

For the past two years, SOTL has increased focus on this line of business. Services business presents a unique opportunity for the company to engage and get a larger share of the customer revenue pie by offering end-to-end solutions. Now that SOTL has developed both services & software solutions capabilities by implementing three Smart Cities Projects and an NFS project, it is well-geared to participate in bigger projects. Management indicated that the company would bid for Smart Cities Projects worth at least ~Rs 2bn-3bn, going ahead. SOTL has also bid for NFS orders worth ~Rs 100bn.

SOTL has participated in BharatNet only as a vendor till now, although the concept has been changing. The government is interested in making it an integrated model with rollout, procurement, network element designs, commissioning, and managing entrusted to a single entity for a particular project. This has opened up new gates for SOTL. Overall, we estimate services & software revenues to grow at a ~39% CAGR over FY17-FY20E.

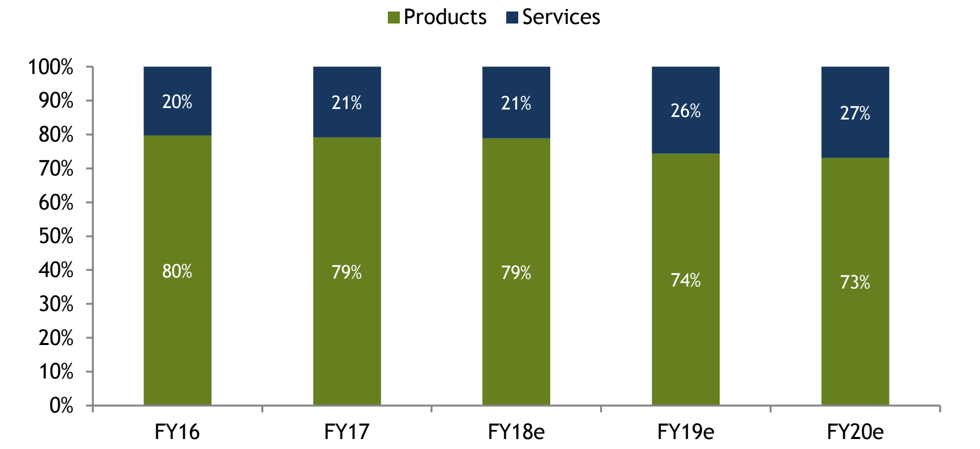
Exhibit 35: Services & Software business revenue to see ~39% CAGR over FY17-FY20E



Source: Company, Equirus Securities

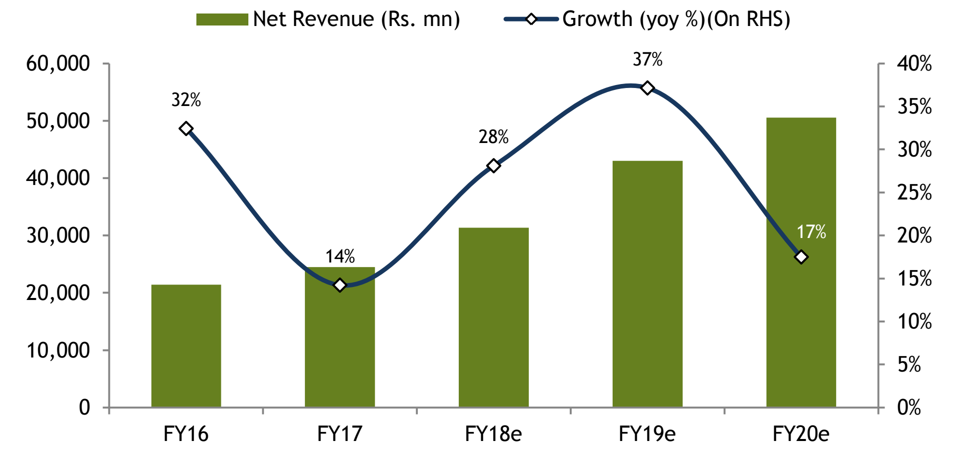
The share of services & software revenues to overall revenue stood at ~21% in FY17. With increasing focus and vast opportunities in this segment, we estimate its share in overall revenues to improve to ~27% by FY20E.

Exhibit 36: Share of services & software in gross revenue pie to increase gradually



Source: Company, Equirus Securities

Exhibit 37: Overall revenues estimated to grow at a ~27% CAGR over FY17-FY20E



Source: Company, Equirus Securities

EBITDA CAGR estimated at ~27% over FY17-20E

EBITDA margins for OF, OFC, copper cables and services & software businesses typically fall in the range of 33-35%, 11-12%, 10-12% and 11-12% respectively. Although we estimate the proportion of services and OFC segment in the overall business would increase over the next few years, in our view SOTL may be able to hold its margins in the 21-22% range. The reasons for the same are outlined below:

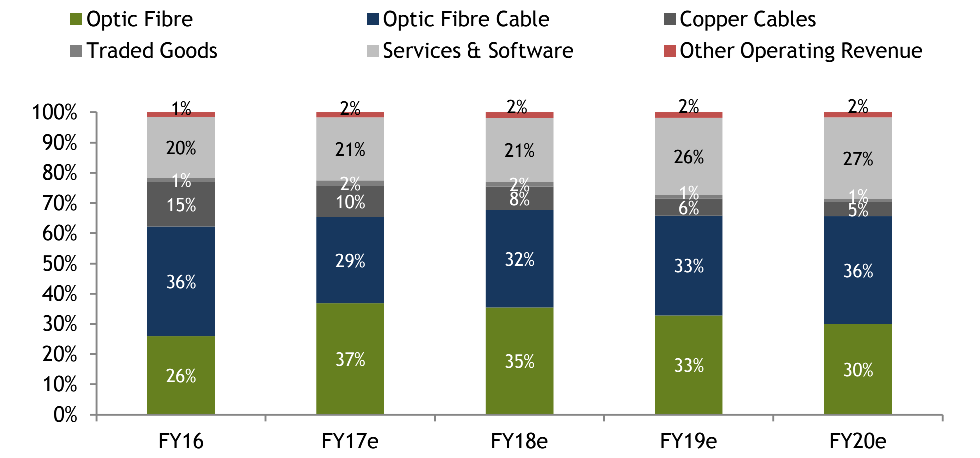
1) Our channel checks and industry data suggests that current spot prices for fibre are around US$ 10/fkm and SOTL could be sealing some of its long term contracts (3-4 years) at higher prices than its historical range of US$ 7-8/fkm. Such contracts may ensure that current margins sustain.

2) Company is in the process of increasing OF capacity from 30mn fkm to 50mn fkm; with such a big capacity expansion, the typical margins in the OF business may expand further due to positive operating leverage.

3) Improving utilization levels in OFC business may also provide further leverage and the margins in this segment shall also improve going ahead.

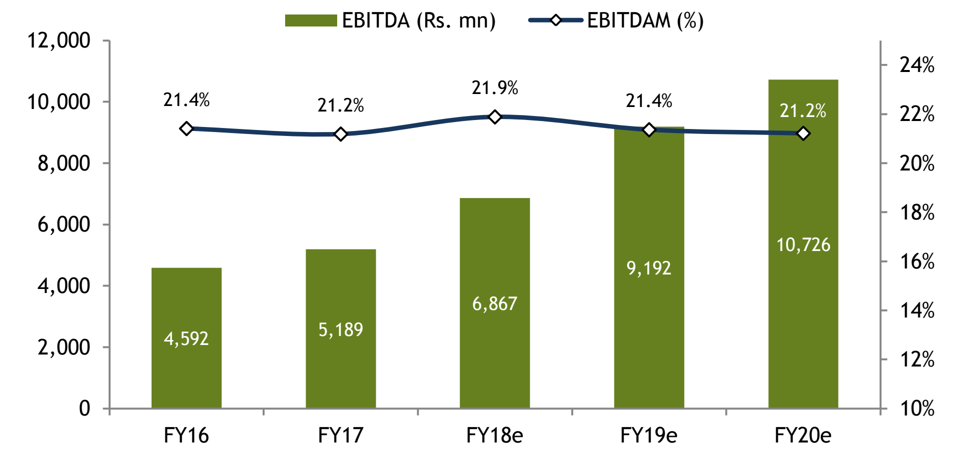
SOTL has reported EBITDA margins of 21.9% in 1HFY18, which in our view is partly due to higher utilization in the cable business and also higher realisations in China. Our channel checks suggest that the realisations in China market are currently higher than India as the supply continues to lag the demand. We estimate such realisations to hold in FY18E and gradually taper down over the next 2 years as the supply builds up.

Exhibit 38: EBITDAM to dip marginally going ahead as OF revenue share declines and that of services and OFC increases



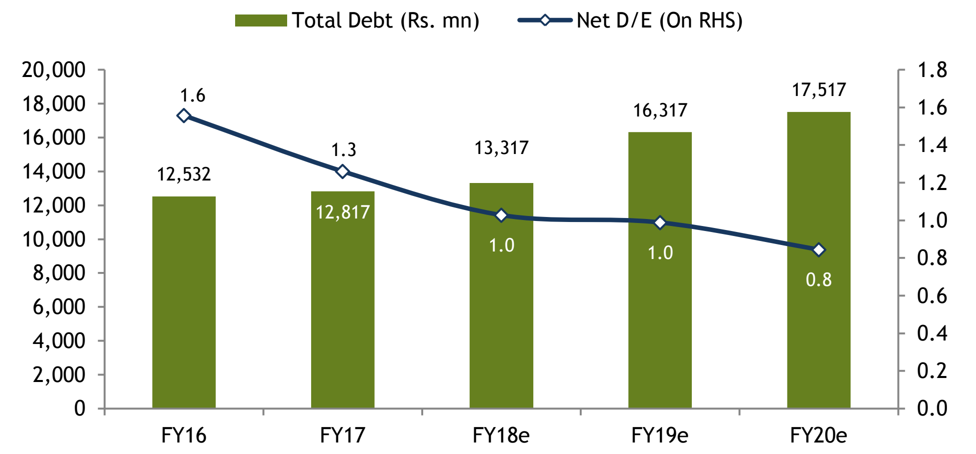
Source: Company, Equirus Securities

Exhibit 39: Absolute EBITDA to increase at ~27% CAGR over FY17-FY20E



Source: Company, Equirus Securities

Exhibit 40: Net D/E ratio to come down to ~0.8x in FY20E from ~1.3x in FY17

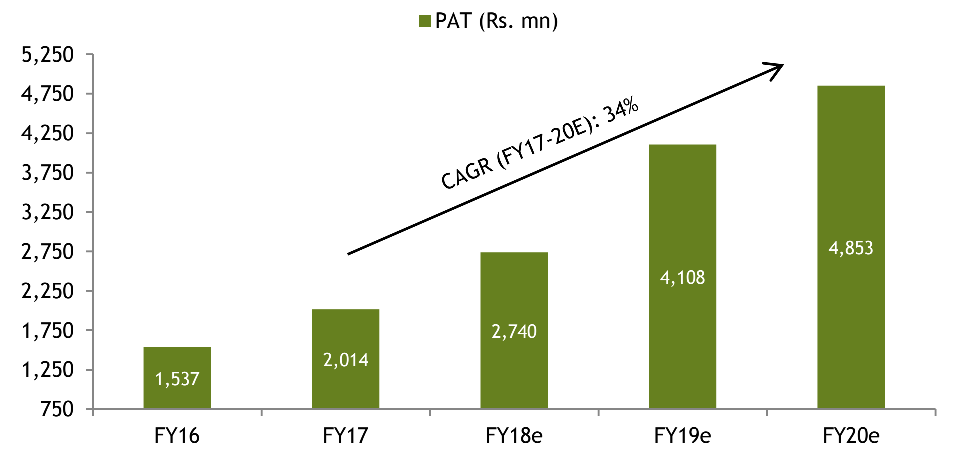


Source: Company, Equirus Securities

Major part of capex to be funded by internal accruals

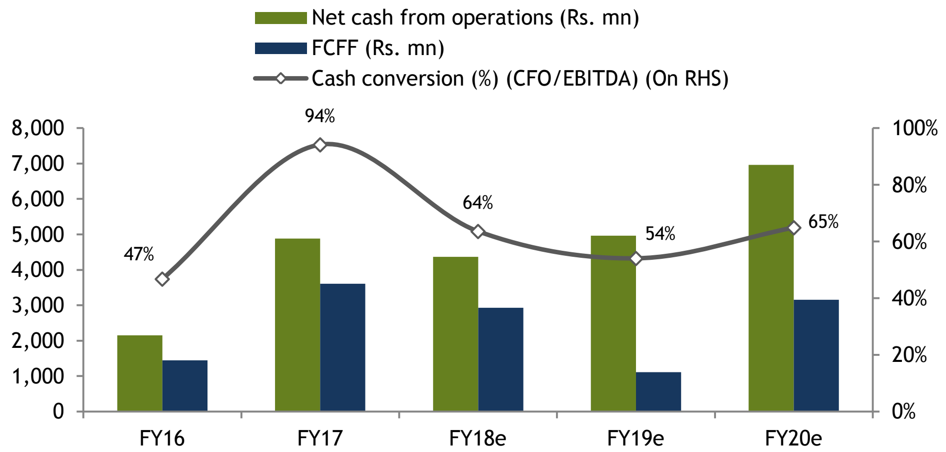
SOTL has announced that it would invest ~Rs 12bn (~Rs. 3bn in FY18 and ~Rs. 4.5bn in each FY19 and FY20) to expand OF capacity from 30mn fkm to 50mn fkm. We estimate that as the cable capacity nears full utilization, SOTL would need to further expand OFC capacity again in FY20 to cater to growing demand. We are building capex of ~Rs. 0.5bn in each FY19 and FY20 for the same. Management indicated that it would fund the capex through a mix of internal accruals and debt and would strive to maintain a net D/E ratio to ~1x. We estimate SOTL would take on ~Rs 5bn of debt to fund this expansion and fund the rest from cash flow from operations. With that, the company's net D/E would come down to ~0.8x in FY20 from ~1.3x in FY17.

Exhibit 41: PAT to grow at a ~34% CAGR over FY17-FY20E



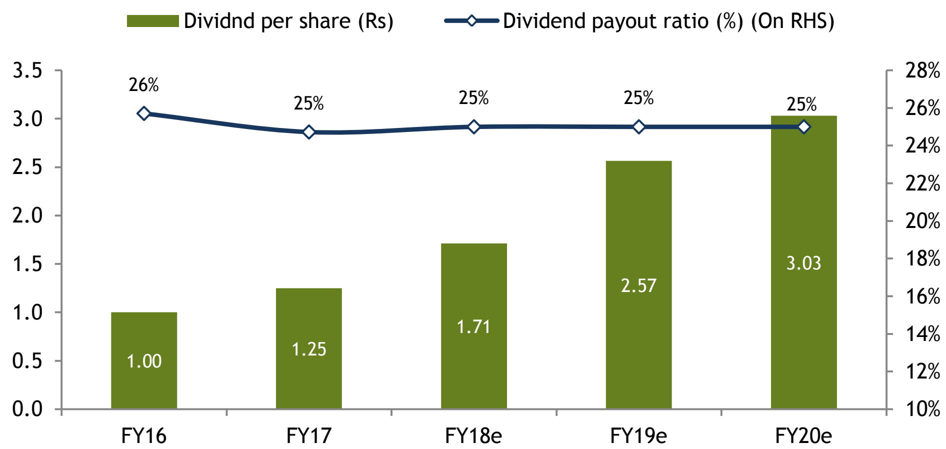
Source: Company, Equirus Securities

Exhibit 42: Cash conversion ratio healthy despite high WC requirements



Source: Company, Equirus Securities

Exhibit 43: Policy of maintaining a pre-tax dividend payout ratio of ~25%



Source: Company, Equirus Securities

Peer performance

SOTL's performance has been much better than peers

Himachal Futuristic Communications Ltd (HFCL) and Vindhya Telelinks (Vindhya) have similar value chains as SOTL. However, HFCL and Vindhya derive most of their revenues from EPC/turnkey projects (HFCL ~70%, Vindhya~75%). Also, both these players do not have a vertically-integrated products business as SOTL. While Vindhya does not have any significant OF capacity, HFCL has recently announced that it would develop ~6mn fkm OF capacity by FY19-end. SOTL's OF capacity would reach 50mn fkm by 2QFY19. HFCL and Vindhya's OFC capacity stand at 11.7mn fkm and ~1-1.5mn fkm (estimated) respectively vs. SOTL's 15mn fkm. Vertical integration in the products business is the primary reason for SOTL's best-in-class margins even as others were hit by firmed up OF prices due to global supply constraints.

Exhibit 44: SOTL's performance has been better than peers in most aspects

	Sterlite Technologies		HFCL			Vindhya Telelinks			Comments
	FY16	FY17	FY15	FY16	FY17	FY15	FY16	FY17	
Revenue	21,440	24,489	25,531	25,801	21,307	6,848	10,161	10,334	While others have slowed down, SOTL continues to grow at a healthy rate
Growth (%)	32%	14%	26%	1%	-17%	49%	48%	2%	
EBITDA	4,592	5,189	1,652	3,161	1,839	1,023	1,720	1,278	
Margin (%)	21%	21%	6%	12%	9%	15%	17%	12%	SOTL has maintained best-in-class margins
PAT	1,537	2,014	3,116	1,532	1,297	746	1,003	868	
Margin (%)	7%	8%	12%	6%	6%	11%	10%	8%	
CFO	2,147	4,885	1,294	4	1,357	-1,144	709	882	
CFO/EBITDA(1-T)	65%	111%	78%	0%	74%	-126%	59%	96%	SOTL's cash flow conversion is better than peers
Receivable days	101	104	46	105	196	169	136	152	
Payable days	136	141	256	237	286	113	88	108	
Inventory days	74	92	175	156	158	63	43	60	
Cash conversion cycle	38	56	-35	23	68	120	91	104	SOTL's cash conversion cycle is best in industry
Gross Fixed asset turnover	1.06	1.14	4.41	5.14	4.59	3.62	4.78	4.87	
Working cap turnover	3.75	4.40	4.09	2.55	1.96	1.83	2.33	2.33	
Net debt/Equity	1.6	1.3	0.1	0.5	0.4	0.7	0.6	0.5	
ROE (%)	23%	25%	39%	17%	14%	20%	23%	16%	Return ratios improving for SOTL but declining for others
RoIC (%)		14%	32%	16%	14%	17%	18%	13%	

Source: Company, Equirus Securities

Exhibit 45: Comparison with global peers

	FY16/CY15					FY17/CY16				
	Sterlite	Corning	Prysmian	Furukawa	YOFC	Sterlite	Corning	Prysmian	Furukawa	YOFC
Revenue ($mn)	327	9,111	7,856	6,948	835	365	9,390	8,050	7,454	1,004
% of revenue from telecom business	100%	33%	15%	18%	100%	100%	32%	15%	20%	100%
Telecom revenue ($mn)	**327**	**2,980**	**1,184**	**1,218**	**835**	**365**	**3,005**	**1,238**	**1,489**	**1,004**
- Growth (yoy %)	32.4%	12.4%	11.6%	2.5%	18.6%	14.2%	0.8%	4.6%	22.3%	20.3%
EBITDA ($mn)	70	-	143	101	95	77	-	173	-	116
- EBITDAM (%)	21.4%	-	12.1%	8.3%	11.4%	21.2%	-	14.0%	-	11.6%
EBIT ($mn)	51	-	-	62	81	54	-	-	126	99
- EBITM (%)	15.6%	-	-	5.1%	9.6%	14.7%	-	-	8.4%	9.9%
Net profit ($mn)	23	237	-	-	71	30	245	-	-	87
- PATM (%)	7.2%	8.0%	-	-	8.5%	8.2%	8.2%	-	-	8.7%
Capex ($mn)	35	171	-	42	-	32	245	-	-	-

Source: Bloomberg, Company Filings, Equirus Securities

Exhibit 46: Highlights and commentary from global peers

Corning	▪ Corning's OF manufacturing facilities are in USA, China and India (JV with Finolex); Cabling operations are located in USA, Germany, Poland, China and other countries; estimated OF capacity is ~60-70mn fkm ▪ Company expects a low-teen percentage growth in 2017 on yoy basis ▪ Company has set a US$ 5bn revenue target from telecom communications segment by 2020 (14% CAGR over CY16-CY20)
Prysmian	▪ Prysmian has 5 production factories around the world along with centers of excellence in Italy, Netherlands and France; estimated OF capacity is ~40-45mn fkm ▪ Company expects growth to remain strong in 2017 helped by growth in USA and European markets as well as pick up in Australia; Sales in 1HCY17 grew by ~13% yoy ▪ It has signed a three-year OFC supply contract with Verizon Communications to enhance the telecom operator's network; 17mn fkm supply contract is worth US$ 300mn ▪ The company has announced a three-year € 250mn investment plan to expand production capacity and improve manufacturing efficiency ▪ Management believes that optical fibre market would continue to grow at >10%, mainly driven by 5G and FTTX rollouts and firm pricing due to a tight supply situation globally
Furukawa	▪ Furukawa has earmarked JPY 15bn for capex in infrastructure (including telecom division); telecom capex would go towards increasing OF production capacity and optical components, in line with increasing demand ▪ Management expects telecom division to grow by ~10% in FY17 (Apr'17 to Mar'18)
YOFC	▪ YOFC is the largest supplier of OF and OFC in the world; the company was able to grow its revenue by ~20% in 2016 due to strong demand from domestic operators ▪ Management believes that construction of next generation networks and IOT would continue to support global demand for optic fibre ▪ Under China's 13th Five-Year Plan and IT policies, Chinese telecom operators continue to invest in rural broadband, 4G mobile networks and FTTH
Our view	▪ **All leading OF and OFC suppliers in the world continue to invest in production capabilities as demand has been outstripping supply of optic fibre** ▪ **Demand is here to stay in the foreseeable future as public entities and telecom operators continue to upgrade their existing infrastructure**

Source: Company Filings, Equirus Securities

Valuation

At CMP of Rs. 257, SOTL is trading at a P/E multiple of 25x/21x and an EV/EBITDA multiple of 13x/11x on our FY19E/FY20E estimates.
Given the recent demerger of SOTL's power business, and its unique positioning as the only global company with an end-to-end capability in terms of products, services and software, valuing the company is little tricky due to its limited trading history and lack of exact peers. Hence, we have cross-checked our valuation based on the following two methodologies:

- **DCF analysis**: To understand what may be the absolute multiple
- **Peer valuation multiples**: To understand how the market is valuing peers

Based on this exercise, we think the fair value PE multiple for SOTL shall be around 30x (**Exhibit 49**), given its strong growth profile, improving return ratios and strong balance sheet. We arrive at our Mar'19 TP of Rs. 300, by applying a P/E multiple of 29x on our FY19 estimates. Our TP implies a 12% ATR in 17 months and we assign ADD rating to the stock.

DCF Analysis

We have modeled our DCF analysis based on three-stage assumptions. In the explicit phase i.e. for the next 5 years (FY18E-FY22E), we are modeling in average sales growth (FY18E-FY22E) of 23.5% and NOPAT margin of 11.5% (FY17 NOPAT margins at 12%). We expect average Invested capital turns to improve to 1.5 in explicit phase.

Exhibit 47: Key DCF assumptions

Starting year FY18e	FY17A	Explicit phase FY18E-22E	Consolidation phase FY23E-32E	Terminal value assumptions
Sales growth (%)	14.2%	23.5%	15.4%	5.0%
NOPAT margin (%)	12.4%	11.5%	11.0%	11.0%
Invested capital turn	1.2	1.5	1.6	
Core RoIC (%)	15%	19%	19%	19%
Cost of capital (%)	11.0%	11.0%	11.0%	11.0%
LT growth (%)	5.0%	5.0%	5.0%	5.0%

*Source: Equirus Securities, * NOPAT= EBIT *(1-t), Core ROIC is excluding cash*

In the consolidation phase, we are tapering down average sales growth (FY23E-FY32E) to 15.4% and average NOPAT margin to 11%; however we estimate invested capital turn shall rise to 1.6 times.

We arrive at a Mar'19 TP of Rs. 310 using DCF analysis, as shown below.

Exhibit 48: DCF valuation per share

SOTL (Rs. mn)	Valuation
PV of 15 year cash flows	19,710
+PV of terminal value	85,319
= Enterprise value	1,05,028
Less: Debt	13,269
Add: Investments, Excess Cash, Equity Infusion	1,253
=Equity value	93,013
Outstanding shares (mn)	400.3
Current fair value per share (Rs)	232
Target price on Mar'19 (Rs)	310

Source: Equirus Securities

In **Exhibit 49**, we present the sensitivity of implied fair value P/E (FY19E) to our long-term growth and cost of capital assumptions. On an average, we arrive at a fair value P/E multiple of 30x, which in our view, the market would be willing to pay for SOTL given its unique positioning as a silicon-to-software player.

Exhibit 49: Sensitivity of FY19 implied P/E multiple to our DCF assumptions

Implied P/E		Long term growth				
		4.0%	4.5%	5.0%	5.5%	6.0%
Cost of capital	10.0%	37.2	39.3	41.7	44.8	48.5
	10.5%	32.2	33.8	35.6	37.8	40.5
	11.0%	28.0	29.2	30.6	32.3	34.3
	11.5%	24.5	25.5	26.5	27.8	29.2
	12.0%	21.5	22.3	23.1	24.0	25.1
	Average	30x				

Source: Equirus Securities

Peer Valuation

SOTL currently trades at TTM P/E multiple of 42x which seems high when compared to its historical valuation (range of 15x-30x on TTM P/E) and the valuation of its global and Indian peers (**Exhibit 53**).

SOTL is targeting to triple its profits in next three years. In our view, given the vast opportunity size due to telecom infrastructure investments, new growth avenues opened up by the Services & Software vertical and strong management team with a proven track record, the company is very well positioned to scale new heights.

We are estimating EPS CAGR (FY17-20E) of 34% and given the market leadership and vertical integration of SOTL in the optic fibre industry, SOTL may sustain such premium valuations.

Exhibit 50: TTM P/E vs. 2 yr forward EPS growth

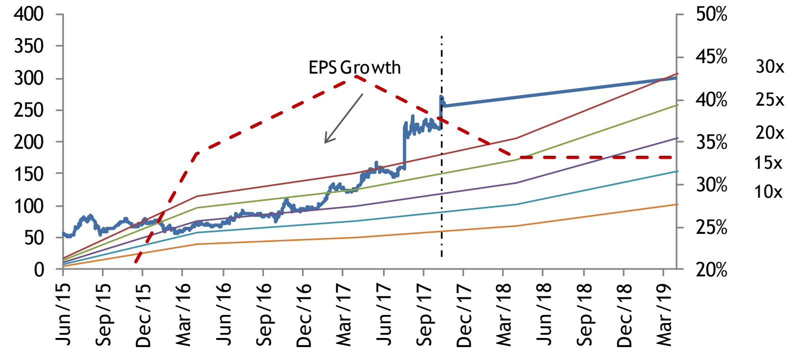


Exhibit 51: TTM EV/EBITDA vs. 2 yr forward EBITDA growth

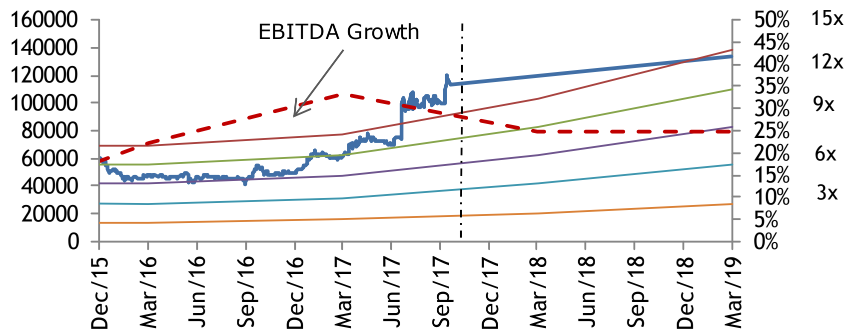
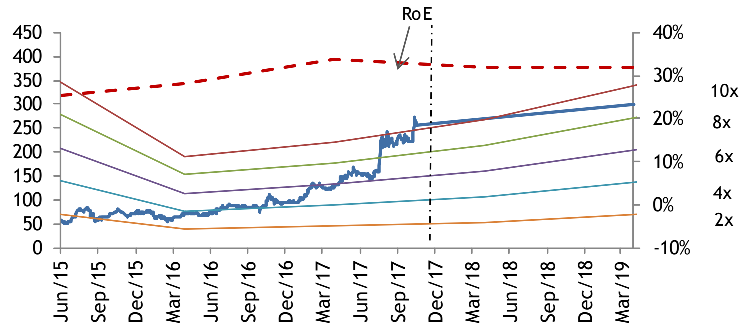


Exhibit 52: TTM P/B vs. 2 yr forward RoE



Source: Equirus Securities

Exhibit 53: Relative valuation vs. Indian and global peers

Global Peers																
Company name	**Price**	**M Cap**	**Sales**	**Sales CAGR**	**EBITDAM (%)**	**EPS CAGR**	**Net D/E**		**P/E**			**EV/EBITDA**		**ROE**	**ROIC**	**Div Yield (%)**
In mn			**CY16**	**(CY16-18e)**	**CY16**	**(CY16-18e)**	**CY16**	**CY16**	**CY17e**	**CY18e**	**CY16**	**CY17e**	**CY18e**	**CY16**	**CY16**	**CY17e**
Corning Inc ($)	29.7	26,797	9,390	5.5%	32.0%	8.7%	-0.1	19.1	17.6	16.2	8.5	8.4	8.6	14.3%	6.6%	2.1%
Prysmian (Euro)	29.0	6,278	7,567	3.6%	8.1%	22.4%	0.3	24.0	18.5	16.0	11.2	9.2	8.2	18.5%	9.1%	1.6%
Furukawa Electric (Yen)	6460.0	4,56,508	8,43,344	7.4%	7.4%	33.8%	0.9	25.9	16.3	14.5	10.7	9.3	8.4	11.7%	7.6%	1.1%
YOFC (HKD)	29.1	19,850	8,102	18.0%	11.6%	32.8%	0.0	28.3	18.3	16.0	21.2	14.1	11.7	21.8%	12.4%	1.6%

Indian Peers																
Company name	**Price**	**M Cap**	**Sales**	**Sales CAGR**	**EBITDAM (%)**	**EPS CAGR**	**Net D/E**		**P/E**			**EV/EBITDA**		**ROE**	**ROIC**	**Div Yield (%)**
In Rs. mn			**FY17**	**(FY17-19e)**	**FY17**	**(FY17-19e)**	**FY17**	**FY17**	**FY18e**	**FY19e**	**FY17**	**FY18e**	**FY19e**	**FY17**	**FY17**	**FY18e**
HFCL	27.8	34,455	23,776	NA	8.0%	NA	0.4	26.5	NA	NA	20.0	NA	NA	13.7%	12.5%	NA
Vindhya Telelinks	1291.8	15,308	10,334	NA	12.4%	NA	0.4	17.6	NA	NA	13.7	NA	NA	16.3%	11.2%	NA
Aksh Optifibre	24.4	3,961	4,761	NA	9.8%	NA	0.2	36.1	NA	NA	10.4	NA	NA	2.4%	2.6%	NA
Finolex Cables (EE)	597.0	91,305	26,707	22.3%	14.8%	16.1%	-0.3	22.8	19.9	16.9	21.1	17.6	13.9	19.5%	19.3%	0.5%
Sterlite Technologies (EE)	**257.0**	**1,02,881**	**24,489**	**32.5%**	**21.2%**	**42.8%**	**1.3**	**51.1**	**37.6**	**25.0**	**22.0**	**16.6**	**12.7**	**24.6%**	**14.4%**	**0.7%**

*Source: Bloomberg, Equirus Securities, *as on 18th Oct'17*

Investment risks

Downside risks

1. **Commodity risk:** Copper and crude derivatives make up for a substantial part of SOTL's raw material requirements. The company either passes on movement in copper prices to customers or hedges the risk on LME. Also, if price variations in crude oil derivatives such as furnace oil and polymer are not managed effectively, the company's profitability could be affected severely.
2. **Inadequate investments by telcos:** Most Indian telcos are under financial stress after the entry of RJio, as their ARPUs from both voice and data have declined significantly after RJio's promotional offers. If this situation continues going ahead, the ability of telcos to carry out their capex plans could be compromised.
3. **Delay in public projects like BharatNet, Smart Cities:** As in the past, government projects fall prey to bureaucratic hurdles and unforeseen circumstances. If execution of these projects is delayed, it could severely affect SOTL's revenue projections.

Corporate Governance

Following are the key highlights of our preliminary assessment of the level of corporate governance in the company through its FY17 Annual Report:

Board of Directors

Composition: Company's Board of Directors is composed of eight Directors, of whom two are whole-time Directors and six Non-executive Directors, including one woman Director. Also, 4 out of 6 non-executive directors are Independent Directors. During the financial year, four board meetings were held and the time gap between any two meetings did not exceed 120 days.

Background: All Independent Directors possess requisite qualifications and are highly experienced in their own fields. None of them served as Independent Directors in more than 7 listed firms.

Committees of the Board: All four board committees (Audit, Nomination & Remuneration, Stakeholders' Relationship and CSR committees) are headed by non-executive and independent directors. Also, 2 additional committees are formed: Banking and Authorization Committee, and Allotment Committee.

Disclosure Norm

As per our preliminary study, we do not find any issues on this front. The company follows disclosure norms as stipulated by the listing agreement of the exchanges and is timely in coming up with quarterly results and other disclosures. Management holds earnings call after quarterly results. Company has a policy of keeping post tax dividend payout ratio at 30%.

Concerns

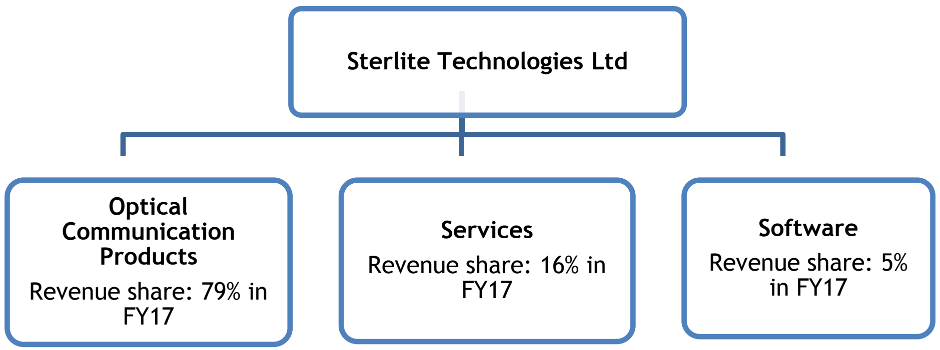
4 out of 8 Directors attended only 2 or fewer board meetings during the year.

Annexure 1: Company Overview

Background

SOTL is a pure play Telecom products, Services & Software Company engaged in designing, building and managing smart digital networks. The company shares a common lineage with Vedanta Resources Plc – globally diversified natural resources major.

Exhibit 54: SOTL has developed Silicon-to-Software capabilities over the years



Source: Company, Equirus Securities

SOTL is one of the global leaders in Optical Communications Products such as Optic Fibre (OF), Optic Fibre Cable (OFC) and Structured Data Cables. It is the only vertically integrated player in this space in India which gives it unique advantage over peers. Company's manufacturing operations are located in India, China and Brazil and sales network spans across 6 continents and more than 100 countries. SOTL's OF and OFC production capacities currently stand at 30mn fkm and 15mn fkm respectively (including 6.5mn fkm OF capacity in China).

The company ventured into the services space in FY15 with the NFS project for the Indian army. Subsequently, it executed three Smart Cities Projects (Ahmedabad, Gandhinagar and Jaipur), enabling it to establish its expertise in designing, engineering, building and managing broadband networks.

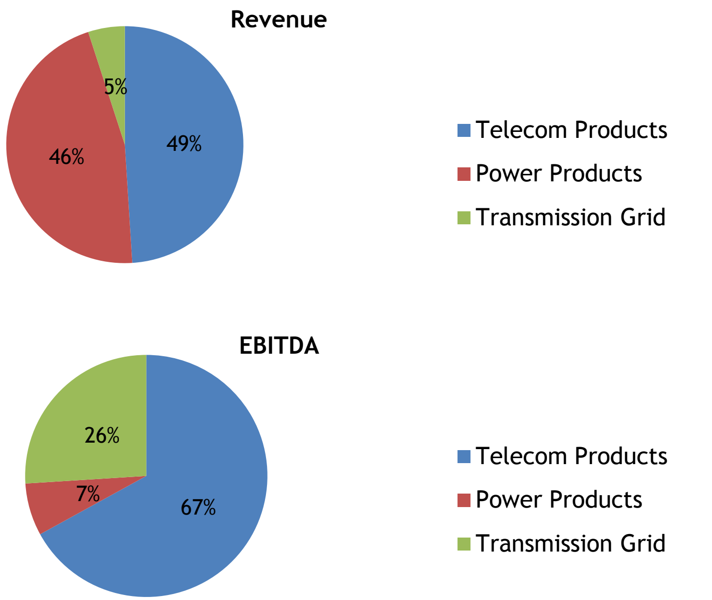
By acquiring Elitecore Technologies in 2015, SOTL has broadened its offerings portfolio by including telecom software under its fold.

SOTL can boast of having India's only Centre of Excellence for broadband research and a portfolio of over 155 patents to its name. It works with 8 of top-10 global telcos with significant global presence.

Demerger of power products and grid business

As SOTL's both businesses – Telecom and Power Products – reached a certain level of scale, management found that it was necessary to put a different focus on both areas. In the restructuring exercise, SOTL became a pure play telecom products & solutions company while the power products & power transmission grid business was demerged into a separate non-listed entity – Sterlite Power Transmission Ltd (SPTL).

Exhibit 55: Segment contribution in FY15 suggests that power business was a drag on the company's overall performance



Source: Company, Equirus Securities

Key highlights of the demerger:

- Appointed date of the demerger was 1 Apr'15 and effective date was 23 May'16.
- For every 5 equity shares held by a shareholder in STL, he/she retained 5 shares of 'new' STL + an option to receive either (a) 1 equity share in SPTL, (b) 1 RPS with a dividend of 8%/annum. RPS could be redeemed at Rs 125.8 with dividend after 18 months of allotment or at Rs. 112.3 within 30 days of allotment.
- SPTL was valued at ~Rs 8.85bn; implied value of Rs. 22.46/share for demerged undertaking

Company History:

Year	Milestone
1993	Commenced Optic Fibre Cable (OFC) manufacturing
1995	Started Optic Fibre (OF) manufacturing with 0.5mn fkm capacity
2006	Commenced Power Conductor business
2010	Started Power Grid & FTTx infrastructure business
2012	Supplied a diverse range of OFC for the first ever F1 race held in India at Buddha International Circuit
2013	China JV commenced OF production at facility located in Haimen, Jiangsu Province
2014	Entered into JV with Conduspar Condutores Eletricos to manufacture OFC in Brazil; Launched enhanced family of bend-insensitive fibres
2015	Secured a contract from BSNL for end-to-end deployment including design, engineering, implementation and maintenance of a part of NFS project
2016	Completed 100% acquisition of Elitecore Technologies to widen its offerings to global telcos and include software solutions to it; doubled OFC manufacturing capacity to 15mn fkm; demerged power products and grid business and became pure play telecom company
2017	SOTL's optical communications products got qualified with Europe's CPR; announced next phase of OF capacity expansion to take it to 50mn fkm by Jun'19

Key management profile

Mr. Anil Kumar Agarwal -Non-Executive Chairman

Mr. Agarwal is the Executive Chairman of Vedanta Resources Plc. and Chairman Emeritus of Vedanta Ltd. He had founded the Sterlite Group in 1979 and has over 40 years of entrepreneurial and business experience.

Mr. Pravin Agarwal-Vice Chairman and Whole-Time Director

Mr. Agarwal is the Vice Chairman and Whole Time Director of SOTL, and is also the Non-Executive Chairman of SPTL (demerged undertaking for the power business). He has been closely involved with Sterlite Group's operations in India since inception, and has been instrumental in the growth of the telecom and power businesses. He has about three decades of rich experience in general management and commercial matters.

Mr. A. R. Narayanaswamy – Non-Executive and Independent Director

Mr. Narayanaswamy is a commerce graduate from Sydenham College, Mumbai, and a Fellow Member of the Institute of Chartered Accountants of India (ICAI). He joined the SOTL Board in Jul'07. He is inter alia an Independent Director in other Vedanta Group companies - Hindustan Zinc Limited and Sterlite Power Grid Ventures Limited. He is also a management consultant with over 40 years of experience across accounting, financial management and information technology.

Mr. Arun Todarwal – Non-Executive and Independent Director

Mr. Todarwal is a partner at M/s Todarwal &Todarwal, a Mumbai-based firm of chartered accountants and also a member of ICAI. He experience in management consultancy, finance and audit spans over three decades.

Ms. Avaantika Kakkar -Non-Executive and Independent Director

Ms. Kakkar's a corporate and commercial lawyer and currently leads Khaitan & Co.'s Competition Law Practice. She advises on complex merger filings with the CCI. She has varied experience across corporate and securities laws, structured finance, foreign direct investment in real estate, private equity and joint ventures. She also serves as an independent director on the boards of many public companies.

Mr. C. V. Krishnan – Non-Executive and Independent Director

Mr. Krishnan holds a B.Tech degree from IIT Madras and a management degree from IIM Ahmedabad. He has also done advanced training in Industrial Management from the Netherlands and a Global Leadership Program from Michigan, USA. He is the President of Institute of Financial Management and Research (IFMR), Chennai. He also has been President/CEO/MD of reputed organizations, such as M/s E.I.D Parry, Sterlite Industries, India and Konkola Copper Mines, Zambia. His areas of expertise include organizational turnaround, transformation management, corporate growth and financial management.

Dr. Anand Agarwal – CEO and Whole-time Director

Dr. Anand Agarwal has been SOTL's CEO since 2003. He has completed a Bachelor's in Engineering from the Indian Institute of Technology, Kanpur, and Masters' and Ph.D. from the Rensselaer Polytechnic Institute, USA. It is under his leadership that the company has grown from an optical-fibre manufacturer to one of the leading global providers of products, solutions and services for telecom and power industries.

He has been honored with the prestigious 'Broadband Infrastructure Leader Award' for transforming broadband infrastructure at the Telecom Leadership Forum, 2016. Dr. Agarwal had joined SOTL in 1995, and has held key positions in operations, projects, business development and sales over the years.

Mr. Pratik Agarwal –Non Executive Director
Mr. Agarwal is a Non-Executive Director of the company and is also the CEO of Sterlite Power Transmission Limited. He is a Wharton graduate and an MBA from London Business School. He has been instrumental in building Vedanta Group's infrastructure business which has now significant investments in ports, power transmission and broadband networks, with total AUM worth US$ 2.5bn.

Mr. Anupam Jindal –Chief Finance Officer
Mr. Jindal joined the Vedanta Group in 1998 and then SOTL in 2006. He had worked with the aluminum foils and copper-cables businesses before he headed finance division for Vedanta group's mining operations in Australia. Mr. Jindal is a Chartered Accountant from ICAI, and his focus areas have been finance, treasury, accounts and MIS.

Mr. K. S. Rao – Chief Operating Officer, Telecom Products & Services
Mr. Rao holds a Bachelor's degree in Mechanical Engineering and had joined SOTL in 1993. His key focus areas have been engineering, manufacturing, product development, project management and business development.

Dr. Badri Gomatam – Chief Technology Officer
Dr. Badri Gomatam has completed his MS and Ph.D from the University of Massachusetts, Amherst. He joined SOTL in 2011 and currently leads its Centre of Excellence. He has over 22 years of experience that spans across product development, marketing and business development experience in high-speed integrated circuits and optical communications.

Mr. Nikhil Jain – Head, Telecom Software
Mr. Jain holds a Masters in Computer Applications from LD College of Engineering, Ahmedabad. He is one of the founding members of Sterlite Tech's software division, and has over 19 years of experience. He manages and guides the software division's global business units.

Mr. Ankit Agarwal – Head - Global Sales, Telecom Products
Mr. Agarwal joined Sterlite Tech in 2007 and currently heads global sales for Telecom Products. In addition to it, he is responsible for identifying and executing strategic opportunities globally. Mr. Agarwal holds a Bachelor's degree from the University of Southern California and an MBA from the London Business School.

Mr. Vikas Sehgal – Head Sales – Telecom Services
Mr. Sehgal has 12 years of experience in the telecom industry with over 25 years of experience overall. He has worked with IBM, EMC Corporation, 3Com, NIIT and Digital Equipment in the past. He has done his Bachelors in Telecommunication Engineering from Shivaji University, Kolhapur.

Mr. Vaibhav Mehta – Head Sales – Telecom Software
Mr. Vaibhav Mehta is Bachelor's in Engineering from VESIT, Mumbai and has been a part of Sterlite Tech's software division's start-up team. He has over 18 years of experience across product, market and business development for software products in the telecom and media space. He currently heads Global Sales Operations for the Company's software business.

Consolidated Quarterly Earnings Forecast and Key Drivers

Rs in Mn	1Q17A	2Q17A	3Q17A	4Q17A	1Q18A	2Q18A	3Q18E	4Q18E	1Q19E	2Q19E	3Q19E	4Q19E	FY17A	FY18E	FY19E	FY20E
Revenue	5,638	5,104	6,741	7,005	7,160	7,793	7,947	8,469	9,221	10,086	11,145	12,568	24,489	31,370	43,021	50,547
Cost of materials consumed	2,134	1,970	2,466	4,067	2,475	2,481	3,381	3,620	4,020	4,400	4,863	5,485	10,637	13,060	18,768	22,067
Purchases of stock-in-trade	98	309	0	0	78	24	0	0	0	0	0	0	407	0	0	0
Change in inventories of finished goods, stock-in-trade and WIP	245	-425	326	-1,206	374	628	0	0	0	0	0	0	-1,061	0	0	0
Other expenses	1,362	1,393	1,830	1,828	1,892	2,061	1,957	2,091	2,325	2,571	2,846	3,231	6,413	8,000	10,973	12,970
Employee benefits expense	657	841	714	691	771	896	861	913	877	957	1,058	1,196	2,903	3,442	4,088	4,784
EBITDA	1,142	1,017	1,405	1,624	1,571	1,703	1,748	1,846	1,999	2,158	2,379	2,656	5,189	6,867	9,192	10,726
Depreciation	361	378	409	445	413	437	456	456	511	511	511	511	1,592	1,762	2,044	2,367
EBIT	782	640	996	1,180	1,158	1,266	1,292	1,389	1,488	1,647	1,868	2,145	3,597	5,105	7,148	8,359
Interest	319	367	301	243	285	243	324	324	333	333	333	333	1,229	1,176	1,333	1,522
Other Income	81	78	46	31	68	86	17	17	57	57	57	57	235	188	228	262
PBT	544	350	741	967	941	1,109	985	1,082	1,212	1,370	1,591	1,869	2,602	4,116	6,042	7,099
Tax	131	-211	197	279	255	327	257	287	334	387	453	539	397	1,127	1,713	2,090
PAT bef. MI & Assoc.	412	561	544	688	685	782	728	795	877	983	1,139	1,330	2,205	2,990	4,329	5,010
Minority Interest	39	35	39	50	72	67	49	48	55	50	54	54	163	236	213	148
Profit from Assoc.	4	-17	-14	-1	-7	-2	-2	-2	-2	-2	-2	-2	-28	-14	-9	-9
Recurring PAT	377	508	491	637	606	712	677	745	820	931	1,083	1,274	2,014	2,740	4,108	4,853
Extraordinaries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reported PAT	377	508	491	637	606	712	677	745	820	931	1,083	1,274	2,014	2,740	4,108	4,853
EPS (Rs)	0.94	1.27	1.23	1.59	1.51	1.78	1.69	1.86	2.05	2.33	2.70	3.18	5.03	6.84	10.26	12.12
Key Drivers																
Gross Revenue from Products (Rs. mn)	-	-	-	-	-	-	-	-	-	-	-	-	20,108	25,475	33,085	38,217
- Optic fibre volume (mn fkm)	-	-	-	-	-	-	-	-	-	-	-	-	26	31	42	50
- Optic fibre cable volume (mn fkm)	-	-	-	-	-	-	-	-	-	-	-	-	6	9	13	17
Revenue from Services (Rs. mn)	-	-	-	-	-	-	-	-	-	-	-	-	5,401	6,996	11,700	14,420
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sequential Growth (%)																
Revenue	-7 %	-9 %	32 %	4 %	2 %	9 %	2 %	7 %	9 %	9 %	11 %	13 %	-	-	-	-
Cost of materials consumed	-4 %	-8 %	25 %	65 %	-39 %	0 %	36 %	7 %	11 %	9 %	11 %	13 %	-	-	-	-
EBITDA	-16 %	-11 %	38 %	16 %	-3 %	8 %	3 %	6 %	8 %	8 %	10 %	12 %	-	-	-	-
EBIT	-20 %	-18 %	56 %	18 %	-2 %	9 %	2 %	8 %	7 %	11 %	13 %	15 %	-	-	-	-
Recurring PAT	-31 %	35 %	-3 %	30 %	-5 %	18 %	-5 %	10 %	10 %	13 %	16 %	18 %	-	-	-	-
EPS	-31 %	35 %	-3 %	30 %	-5 %	18 %	-5 %	10 %	10 %	13 %	16 %	18 %	-	-	-	-
Yearly Growth (%)																
Revenue	22 %	-1 %	18 %	15 %	27 %	53 %	18 %	21 %	29 %	29 %	40 %	48 %	14 %	28 %	37 %	17 %
EBITDA	14 %	-10 %	31 %	20 %	37 %	67 %	24 %	14 %	27 %	27 %	36 %	44 %	13 %	32 %	34 %	17 %
EBIT	3 %	-26 %	40 %	21 %	48 %	98 %	30 %	18 %	29 %	30 %	45 %	54 %	8 %	42 %	40 %	17 %
Recurring PAT	22 %	39 %	63 %	16 %	61 %	40 %	38 %	17 %	35 %	31 %	60 %	71 %	31 %	36 %	50 %	18 %
EPS	22 %	39 %	63 %	16 %	61 %	40 %	38 %	17 %	35 %	31 %	60 %	71 %	31 %	36 %	50 %	18 %
Margin (%)																
EBITDA	20 %	20 %	21 %	23 %	22 %	22 %	22 %	22 %	22 %	21 %	21 %	21 %	21 %	22 %	21 %	21 %
EBIT	14 %	13 %	15 %	17 %	16 %	16 %	16 %	16 %	16 %	16 %	17 %	17 %	15 %	16 %	17 %	17 %
PBT	10 %	7 %	11 %	14 %	13 %	14 %	12 %	13 %	13 %	14 %	14 %	15 %	11 %	13 %	14 %	14 %
PAT	7 %	10 %	7 %	9 %	8 %	9 %	9 %	9 %	9 %	9 %	10 %	10 %	8 %	9 %	10 %	10 %

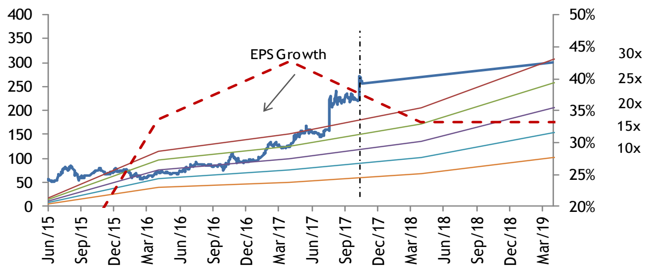
Consolidated Financials

P&L (Rs Mn)	FY17A	FY18E	FY19E	FY20E
Revenue	24,489	31,370	43,021	50,547
Op. Expenditure	19,299	24,503	33,829	39,821
EBITDA	5,189	6,867	9,192	10,726
Depreciation	1,592	1,762	2,044	2,367
EBIT	3,597	5,105	7,148	8,359
Interest Expense	1,229	1,176	1,333	1,522
Other Income	235	188	228	262
PBT	2,602	4,116	6,042	7,099
Tax	397	1,127	1,713	2,090
PAT bef. MI & Assoc.	2,205	2,990	4,329	5,010
Minority Interest	163	236	213	148
Profit from Assoc.	-28	-14	-9	-9
Recurring PAT	2,014	2,740	4,108	4,853
Extraordinaires	0	0	0	0
Reported PAT	2,014	2,740	4,108	4,853
FDEPS (Rs)	5.0	6.8	10.3	12.1
DPS (Rs)	1.3	1.7	2.6	3.0
CEPS (Rs)	9.1	11.2	15.4	18.0
FCFPS (Rs)	9.1	7.3	2.8	7.9
BVPS (Rs)	22.1	26.8	34.0	42.4
EBITDAM (%)	21 %	22 %	21 %	21 %
PATM (%)	8 %	9 %	10 %	10 %
Tax Rate (%)	15 %	27 %	28 %	29 %
Sales Growth (%)	14 %	28 %	37 %	17 %
FDEPS Growth (%)	31 %	36 %	50 %	18 %

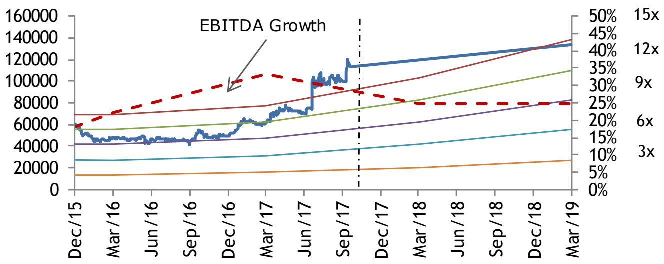
Balance Sheet (Rs Mn)	FY17A	FY18E	FY19E	FY20E
Equity Capital	797	801	801	801
Reserve	8,004	9,919	12,791	16,184
Networth	8,801	10,720	13,592	16,985
Long Term Debt	10,925	11,425	14,425	15,625
Def Tax Liability	1,892	1,892	1,892	1,892
Minority Interest	452	688	901	1,049
Account Payables	4,486	5,369	7,716	9,072
Other Curr Liabi	2,951	2,951	2,951	2,951
Total Liabilities & Equity	29,507	33,045	41,476	47,573
Net Fixed Assets	13,037	14,415	17,414	20,190
Capital WIP	659	0	0	0
Others	1,083	1,069	1,060	1,052
Inventory	3,335	3,524	5,064	5,955
Account Receivables	6,867	8,935	12,254	14,398
Other Current Assets	2,802	2,802	2,802	2,802
Cash	1,724	2,299	2,881	3,175
Total Assets	29,506	33,045	41,476	47,572
Non-cash Working Capital	5,567	6,942	9,454	11,132
Cash Conv Cycle	83.0	80.8	80.2	80.4
WC Turnover	4.4	4.5	4.6	4.5
FA Turnover	1.8	2.2	2.5	2.5
Net D/E	1.0	0.9	0.8	0.7
Revenue/Capital Employed	1.2	1.3	1.5	1.5
Capital Employed/Equity	2.6	2.4	2.3	2.2

Cash Flow (Rs Mn)	FY17A	FY18E	FY19E	FY20E
PBT	2,602	4,116	6,042	7,099
Depreciation	1,592	1,762	2,044	2,367
Others	1,027	988	1,106	1,260
Taxes Paid	763	1,127	1,713	2,090
Change in WC	427	-1,375	-2,512	-1,678
Operating C/F	4,885	4,365	4,967	6,959
Capex	-2,138	-2,481	-5,043	-5,144
Change in Invest	-306	0	0	0
Others	121	188	228	262
Investing C/F	-2,323	-2,293	-4,815	-4,881
Change in Debt	38	500	3,000	1,200
Change in Equity	6	4	0	0
Others	-1,913	-2,000	-2,569	-2,983
Financing C/F	-1,869	-1,496	431	-1,783
Net change in cash	693	575	582	294
RoE (%)	25 %	28 %	34 %	32 %
RoIC (%)	14 %	15 %	18 %	18 %
Core RoIC (%)	15 %	17 %	20 %	19 %
Div Payout (%)	30 %	30 %	30 %	30 %
P/E	51.1	37.6	25.0	21.2
P/B	11.6	9.6	7.6	6.1
P/FCFF	28.3	35.2	93.0	32.6
EV/EBITDA	22.0	16.6	12.7	10.9
EV/Sales	4.7	3.6	2.7	2.3
Dividend Yield (%)	0.5 %	0.7 %	1.0 %	1.2 %

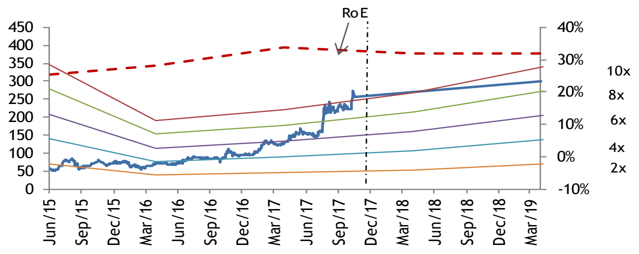
TTM P/E vs. 2 yr forward EPS growth



TTM EV/EBITDA vs. 2 yr forward EBITDA growth



TTM P/B vs. 2 yr forward RoE



Historical Consolidated Financials (FY14 and FY15 financials also include power business)

P&L (Rs Mn)	FY14A	FY15A	FY16A	FY17A
Revenue	25,639	30,971	21,440	24,489
Op. Expenditure	22,885	26,364	16,848	19,299
EBITDA	2,754	4,607	4,592	5,189
Depreciation	1,333	1,850	1,256	1,592
EBIT	1,421	2,757	3,336	3,597
Interest Expense	1,798	3,269	1,192	1,229
Other Income	225	513	162	235
PBT	-152	1	2,305	2,602
Tax	243	37	652	397
PAT bef. MI & Assoc.	-395	-36	1,654	2,205
Minority Interest	-40	-9	61	163
Profit from Assoc.	0	0	-56	-28
Recurring PAT	-355	-27	1,537	2,014
Extraordinaires	0	0	0	0
Reported PAT	-355	-27	1,537	2,014
EPS (Rs)	-0.9	-0.1	3.8	5.0
DPS (Rs)	0.3	0.6	1.0	1.3
CEPS (Rs)	2.5	4.6	7.1	9.1
FCFPS (Rs)	-25.3	-317.7	3.7	9.1
BVPS (Rs)	28.2	38.0	19.1	22.1
EBITDAM (%)	11 %	15 %	21 %	21 %
PATM (%)	-1 %	0 %	7 %	8 %
Tax Rate (%)	-160 %	3,690 %	28 %	15 %
Sales growth (%)	-17 %	21 %	-31 %	14 %
FDEPS growth (%)	-241 %	-93 %	-5,900 %	31 %

Balance Sheet (Rs Mn)	FY14A	FY15A	FY16A	FY17A
Equity Capital	788	788	790	797
Reserve	10,314	14,171	6,756	8,004
Networth	11,101	14,959	7,546	8,801
Long Term Debt	43,382	53,163	10,852	10,925
Def Tax Liability	1,919	1,797	1,680	1,892
Minority Interest	207	230	312	452
Account Payables	5,944	8,997	3,722	4,486
Other Curr Liabi	6,715	4,775	2,133	2,951
Total Liabilities & Equity	69,268	83,922	26,245	29,507
Net Fixed Assets	17,253	40,552	11,370	13,037
Capital WIP	35,488	21,926	1,723	659
Others	2,239	1,812	796	1,083
Inventory	3,196	4,149	2,053	3,335
Account Receivables	5,724	8,344	7,084	6,867
Other Current Assets	2,134	2,791	2,443	2,802
Cash	3,236	4,347	777	1,724
Total Assets	69,269	83,922	26,245	29,506
Non-cash Working Capital	-1,605	1,512	5,725	5,567
Cash Conv Cycle	-22.8	17.8	97.5	83.0
WC Turnover	-16.0	20.5	3.7	4.4
FA Turnover	0.5	0.5	1.6	1.8
Net D/E	3.6	3.3	1.3	1.0
Revenue/Capital Employed	0.5	0.5	0.5	1.2
Capital Employed/Equity	4.3	4.9	4.0	2.6

Cash Flow (Rs Mn)	FY14A	FY15A	FY16A	FY17A
PBT	-152	1	2,305	2,602
Depreciation	1,333	1,850	1,256	1,592
Others	1,955	2,998	1,240	1,027
Taxes Paid	339	220	487	763
Change in WC	-161	-702	-2,167	427
Operating C/F	2,636	3,927	2,147	4,885
Capex	-16,528	-11,512	-2,303	-2,138
Change in Invest	-888	-220	652	-306
Others	150	14	96	121
Investing C/F	-17,266	-11,718	-1,555	-2,323
Change in Debt	15,171	9,863	834	38
Change in Equity	115	4,521	2	6
Others	-4,501	-5,884	-1,645	-1,913
Financing C/F	10,786	8,500	-809	-1,869
Net change in cash	-3,844	709	-217	693
RoE (%)	-3 %	0 %	14 %	25 %
RoIC (%)	9 %	-185 %	5 %	14 %
Core RoIC (%)	8 %	-164 %	6 %	15 %
Div Payout (%)	-39 %	-1,074 %	31 %	30 %
P/E	-289.7	-3,882.5	66.9	51.1
P/B	9.1	6.8	13.5	11.6
P/FCFF	-10.2	-0.8	70.1	28.3
EV/EBITDA	53.3	33.7	25.3	22.0
EV/Sales	5.7	5.0	5.4	4.7
Dividend Yield (%)	0.1 %	0.2 %	0.4 %	0.5 %

Equirus Securities						
Research Analysts	***Sector/Industry***	***Email***		***Equity Sales***	***E-mail***	
Abhishek Shindadkar	*IT Services*	*abhishek.shindadkar@equirus.com*	*91-22-43320643*	*VishadTurakhia*	*vishad.turakhia@equirus.com*	*91-22-43320633*
Ashutosh Tiwari	*Auto, Metals & Mining*	*ashutosh@equirus.com*	*91-79-61909517*	*SubhamSinha*	*subham.sinha@equirus.com*	*91-22-43320631*
Depesh Kashyap	*Mid-Caps*	*depesh.kashyap@equirus.com*	*91-79-61909528*	*SwetaSheth*	*sweta.sheth@equirus.com*	*91-22-43320634*
Devam Modi	*Power & Infrastructure*	*devam@equirus.com*	*91-79-61909516*	*Viral Desai*	*viral.desai@equirus.com*	*91-22-43320635*
Dhaval Dama	*FMCG, Mid-Caps*	*dhaval.dama@equirus.com*	*91-79-61909518*	***Dealing Room***	***E-mail***	
Manoj Gori	*Consumer Durables*	*manoj.gori@equirus.com*	*91-79-61909523*	*Ashish Shah*	*ashishshah@equirus.com*	*91-22-43320662*
Maulik Patel	*Oil and Gas*	*maulik@equirus.com*	*91-79-61909519*	*IleshSavla*	*ilesh.savla@equirus.com*	*91-22-43320666*
Praful Bohra	*Pharmaceuticals*	*praful.bohra@equirus.com*	*91-79-61909532*	*Manoj Kejriwal*	*manoj.kejriwal@equirus.com*	*91-22-43320663*
Rohan Mandora	*Banking & Financial Services*	*rohan.mandora@equirus.com*	*91-79-61909529*	*Dharmesh Mehta*	*dharmesh.mehta@equirus.com*	*91-22-43320661*
Associates		***E-mail***		*SandipAmrutiya*	*sandipamrutiya@equirus.com*	*91-22-43320660*
Ankit Choudhary		*ankit.choudhary@equirus.com*	*91-79-61909533*	***Compliance Officer***	***E-mail***	
Bharat Celly		*bharat.celly@equirus.com*	*91-79-61909524*	*Jay Soni*	*jay.soni@equirus.com*	*91-79-61909561*
Harshit Patel		*harshit.patel@equirus.com*	*91-79-61909522*	***Corporate Communications***	***E-mail***	
Meet Chande		*meet.chande@equirus.com*	*91-79-61909513*	*Mahdokht Bharda*	*mahdokht.bharda@equirus.com*	*91-22-43320647*
ParvaSoni		*parva.soni@equirus.com*	*91-79-61909521*			
Pranav Mehta		*pranav.mehta@equirus.com*	*91-79-61909514*			
RonakSoni		*Ronak.soni@equirus.com*	*91-79-61909525*			
Samkit Shah		*samkit.shah@equirus.com*	*91-79-61909520*			
ShreepalDoshi		*shreepal.doshi@equirus.com*	*91-79-61909541*			
VarunBaxi		*varun.baxi@equirus.com*	*91-79-61909595*			
Vikas Jain		*vikas.jain@equirus.com*	*91-79-61909531*			

Rating & Coverage Definitions:
Absolute Rating
• LONG : Over the investment horizon, ATR >= Ke for companies with Free Float market cap >Rs 5 billion andATR >= 20% for rest of the companies
• ADD: ATR >= 5% but less than Ke over investment horizon
• REDUCE: ATR >= negative 10% but <5% over investment horizon
• SHORT: ATR < negative 10% over investment horizon
Relative Rating
• OVERWEIGHT: Likely to outperform the benchmark by at least 5% over investment horizon
• BENCHMARK: likely to perform in line with the benchmark
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Investment Horizon
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Registered Office:
Equirus Securities Private Limited
Unit No. 1201, 12th Floor, C Wing, Marathon Futurex,
N M Joshi Marg, Lower Parel,
Mumbai-400013.
Tel. No: +91 - (0)22 - 4332 0600
Fax No:+91-(0)22 - 4332 0601

Corporate Office:
3rd floor, House No. 9,
Magnet Corporate Park, Near Zydus Hospital, B/H Intas Sola Bridge,
S.G. Highway Ahmedabad-380054
Gujarat
Tel. No: +91 (0)79 - 6190 9550
Fax No:+91 (0)79 - 6190 9560

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