

# **20 Years**

of Enabling Global Data  
and Broadband Networks

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**Annual Report**  
**2019-20**

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## Forward-looking Statements

In this Annual Report, we have disclosed forward-looking information to enable investors to comprehend our prospects and take investment decisions. This report and other statements - written and oral – that we periodically make contain forward-looking statements that set out anticipated results based on the management's plans and assumptions. We have tried wherever possible to identify such statements by using words such as 'anticipate', 'estimate', 'expects', 'projects', 'intends', 'plans', 'believes', and words of similar substance in connection with any discussion of future performance. We cannot guarantee that these forward-looking statements will be realised, although we believe we have been prudent in assumptions. The achievements of results are subject to risks, uncertainties, and even inaccurate assumptions. Should known or unknown risks or uncertainties materialise, or should underlying assumptions prove inaccurate, actual results could vary materially from those anticipated, estimated, or projected. Readers should keep this in mind. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

# About Us



## WHO WE ARE

We are India's largest R&D-driven telecom equipment company, founded by technocrats, with over 750+ employees.

We are India's first deep-technology product company to be publicly listed in the Indian Stock Exchanges in June, 2017.



## WHAT WE DO

We design, develop and market high-performance optical and data networking products to telecommunications service providers, utilities, defence and government entities around the world. Today, we are ranked among the top-10 suppliers in the global optical aggregation segment and are #1 in India. Our products are deployed in 75+ countries.



## OUR MISSION

To innovate leading-edge, yet pragmatic, telecommunications products and solutions that provide the highest value to our customers world-wide.



## OUR VISION

To build a pioneering innovation-driven, global networking product company.

CELEBRATING

20  
YEARS

# Snapshot of FY 2019-20

Based on Ind AS Consolidated Financial Statements

In ₹ Crore

Particulars	2020	2019	Change(%)
<b>Financial Performance</b>			
Revenue (net of taxes and component sale)	379.79	876.73	(57)
Gross Profit	135.24	366.06	(63)
Operating profit/(loss) after depreciation & impairment	(164.50)	130.33	(226)
Profit/(Loss) before tax	(138.57)	150.02	(192)
Profit/(Loss) after tax	(237.12)	147.24	(261)
EPS (par value of ₹ 10 each) : Basic	(25.76)	16.13	(260)
Diluted	(25.76)	15.39	(267)
<b>Financial Position</b>			
Cash and cash equivalents <sup>(1)</sup>	280.27	369.72	(24)
Net current assets <sup>(2)</sup>	547.73	590.75	(7)
Fixed assets (including assets under development) <sup>(3)</sup>	84.35	140.50	(40)
Total Assets	1,241.15	1,585.28	(22)
Borrowings <sup>(4)</sup>	-	1.19	(100)
Total Equity	1,080.94	1,320.24	(18)
Net cash generated flow from/(used in) operations	0.61	(81.59)	(101)
Free cash generated/(used)	(92.16)	(161.91)	(43)

Particulars	2020	2019	Change
DSO	382	236	146
DPO	117	132	(15)
Inventory	211	64	147
Net Working capital	452	206	246

in days

<sup>(1)</sup> Cash and cash equivalents include fixed deposits under other bank balances, deposits with financial institutions and investment in mutual funds.

<sup>(2)</sup> Excluding the current assets considered in cash and cash equivalents and current liabilities considered as borrowings in this section.

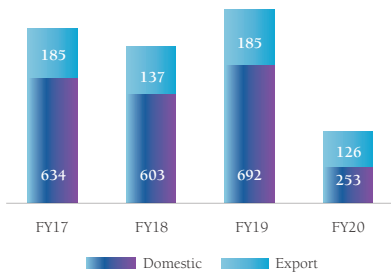
<sup>(3)</sup> Excludes right of use assets.

<sup>(4)</sup> Borrowings include long term borrowings, short term borrowings and current maturities of long term debt.

# Financial Trends

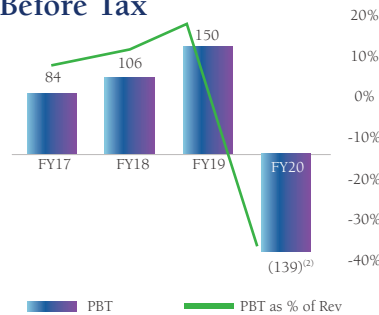
## Revenue<sup>(1)</sup>

In ₹ Crore



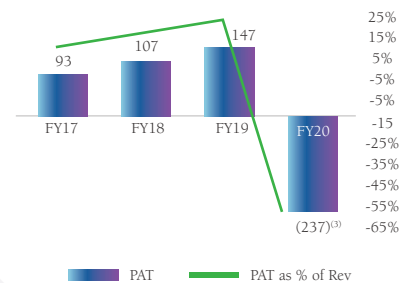
## Profit/(Loss) Before Tax

In ₹ Crore



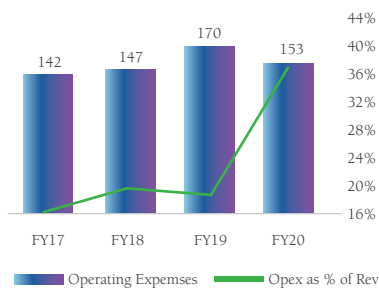
## Profit/(Loss) After Tax

In ₹ Crore



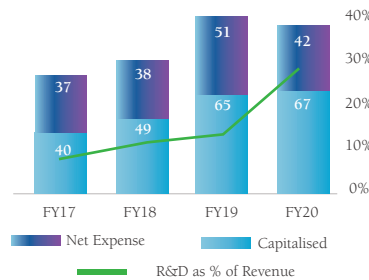
## Operating Expenses (Net)

In ₹ Crore



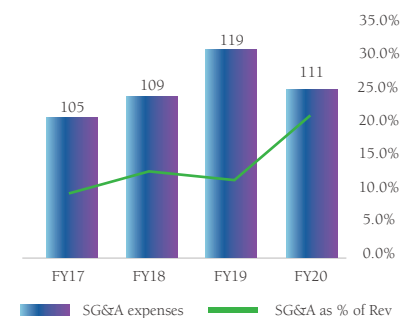
## R&D Expenses

In ₹ Crore



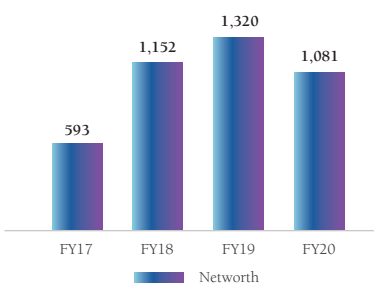
## SG&A Expenses

In ₹ Crore



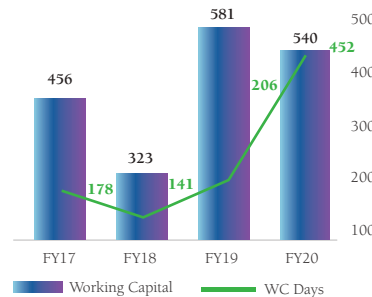
## Networth

In ₹ Crore



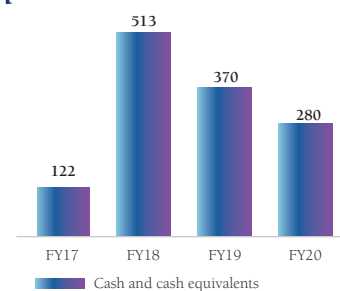
## Working Capital

In ₹ Crore



## Cash and cash equivalents<sup>(4)</sup>

In ₹ Crore



<sup>(1)</sup> Net of taxes and component sales.

<sup>(2)</sup> Includes the impact of an impairment loss of ₹ 70 crore on intangible R&D assets, which include ₹ 33 crore of impairment of intangible assets and ₹ 37 crore of intangible assets under development.

<sup>(3)</sup> Includes the impact of an impairment loss of ₹ 70 crore on intangible R&D assets, which include ₹ 33 crore of impairment of intangible assets and ₹ 37 crore of intangible assets under development and ₹ 99 crore of reversal of deferred tax assets.

<sup>(4)</sup> Cash and cash equivalents include fixed deposits under other bank balances, deposits with financial institutions and investment in mutual funds.





# Chairman's Message

The recent pandemic caused by COVID-19, has resulted in the need for high-quality networks. We are in a sweet-spot, since we provide the telecom equipment required for building such networks, especially with an increasing demand for designed and manufactured in India products.

## Dear Shareholders,

We are living in a world which is getting more connected and digitized with every passing day. Robust, high-speed, ubiquitous telecom networks is now a critical infrastructure for any country. The recent pandemic caused by COVID-19, has resulted in a new normal, with work-from-home, remote learning, tele-medicine, entertainment, e-commerce etc., gaining traction, thereby reinforcing the need for such high-quality networks. We are in a sweet-spot, since we provide the telecom equipment required for building such networks, especially with an increasing demand for designed and manufactured in India products.

FY20 was a challenging year for us. Both our revenues and profitability declined primarily due to weak business environment in India coupled with COVID-19 disruption towards the end of the year. The economic environment continues to be uncertain globally which makes it difficult to predict our near term performance. However, we believe that as a company we are well positioned to emerge stronger from the current challenges.

We are a zero-debt company with a strong balance sheet that enables us to invest and grow even in this challenging environment. Add to that, the new geo-political situation provides us with a greater market opportunity as our products are completely designed and manufactured in India. Our focus to seek opportunities in the global markets is gaining traction as customers seek to de-risk their sourcing countries. Our continued focus on R&D from cost competitive country like India provides us the

required competitive advantage. We built a highly scalable and agile model as a software-defined hardware™ company. We design hardware and outsource manufacturing for speed and scale. Our competitive strength comes from the power of our software with internally designed hardware providing the competitive thrust. Our continued investments in Sales & Marketing is opening up new markets for us. We believe that the long term growth potential of our company is intact despite these short term challenges.

The global telecommunication market is witnessing rapid advances in connected devices, networking technologies and surge in fixed as well as mobile data traffic. Post-Covid19, significant growth is expected in fiber-based home broadband due to wider adoption of work-from-home, videoconferencing, video streaming and video calling applications. This will require more aggressive investments by internet service providers to keep pace with the huge growth in network traffic. Similarly, it is estimated that the average monthly data usage per smartphone user will grow by almost 4X in the next five years driven by 4K/8K video streaming, high-bandwidth VR/AR applications and massive proliferation of IoT/M2M connections worldwide. Emergence of new technologies such as 5G and WiFi 6 technologies will support this data surge by enabling faster access speeds on increasingly powerful smartphones, tablets and connected TV sets both in developing and developed markets. By 2025, over 65% of the world population is expected to be covered by 5G, ~80% of India's population will have an LTE connection and over 200 million homes in India will have a fiber-based broadband connection.

Post-Covid19, significant growth is expected in fiber-based home broadband due to wider adoption of work-from-home, videoconferencing, video streaming and video calling applications. This will require more aggressive investments by internet service providers to keep pace with the huge growth in network traffic.

At Tejas, we have been focused on creating products that enable high-speed broadband access and backbone networks, using technologies such as GPON, DWDM, OTN, PTN etc. which enable high-capacity optical fiber networks. In addition, we have invested in creating leading-edge wireless products based on LTE technology for 4G and 5G radio networks. During FY20, we employed our software-defined hardware™ approach to launch an industry-leading hyper-scalable multi-terabit switch with a unique pay-as-you-grow design, for use in 4G/5G core and data center networks. We also introduced advanced capabilities in our current products such as 10G PON fiber broadband, 200G/400G/400G+ Metro DWDM transport and multi-technology access/edge convergence. We believe that with these new product and feature additions, we are well-positioned to win new customers and gain market share in existing accounts.

De-risking our business is of greater focus to us. A large majority of our revenues come from India as we are one of the leading suppliers of optical networking and broadband access equipment to both Private and Government segments. During FY20, our India revenues declined significantly due to the macro environmental issues that dogged the telecom sector, resulting in reduced capex spending. Add to that, major delays in government defence projects like “Bharatnet” and those in utility and defence sector had impacted our revenue growth. Going forward, we expect that demand for bandwidth in India will continue to increase and India will deliver strong revenues for us.

We continue to focus on the India market while increasing sales investments in international markets. Our current international focus is on countries in Africa and Middle East, South East Asia, Mexico and USA which together account for ~\$9 billion of total addressable market for our products. Moreover, many of the countries in emerging markets have “India-like” needs and our success in India serves as a strong reference in winning new customers in these markets. In FY20, our Africa business grew ~20% year-on-year, while other regions showed a revenue decline on account of delays in orders and shipments in Q4 due to Covid-19. Overall, we are pleased with the strong traction for our products in our target geographies, as evidenced by our signing up 5 Tier-1 service providers this year (including 3 in Africa), which lays the foundation for a firm recovery in the coming fiscal year.

Our focus is to de-risk the business by having at least 50% of our revenues from export markets in the next 2-3 years.

We are enthused by the Honorable Prime Minister of India's call to build an «Atmanirbhar Bharat» which is self-reliant in critical areas

of technologies, such as telecom, which have long-term security as well as economic significance. As India's leading telecom equipment company with a focus on design-led manufacturing, we are fully capable to step-up and meet the critical network requirements within the country. We see strong intent from the Government to strengthen policies such as Preference to Make in India (PMI), to promote Indian products, that have high domestic content and with significant Indian R&D and IPR.

As the world struggles to come to grips with the Covid-19 pandemic, we are taking all possible steps to ensure health and safety of our employees and all our stakeholders. We have implemented a comprehensive business continuity plan that addresses the full lifecycle of customer ordering, order fulfillment, post-sales support through virtualized meetings, greater use of internal collaboration tools, close tracking of critical components, preventive health measures in all our offices and facilities. We have implemented a work-from-home policy, which gives flexibility to employees, who can do so without resulting in any loss of productivity.

We are actively monitoring the situation as it evolves and responding in real-time to ensure that there is limited impact on our business operations or customer services without compromising the safety and well-being of any stakeholder.

On behalf of the Board of Directors of Tejas Networks, we thank the Government of India, Government of Karnataka, all Government agencies, Governments of various countries where we have business operations and we look forward to their continued support. We are grateful to our customers, employees, shareholders, suppliers and bankers, all of whom have supported us during these challenging times.

As Charles Dickens said, “It was the best of times, it was the worst of times”. While the near-term challenges remain and are continuing, the medium to long-term opportunities in front of us gives us a lot of confidence. As a company, today, we are well positioned to capitalize on the opportunities and grow. I wish you all good health and inner strength to tide over these testing times.

Warm regards,

Bengaluru  
April 21, 2020

**Balakrishnan V.**  
Chairman, Board of Directors



# CEO and MD's Statement

The increased data consumption is the fundamental long-term growth driver for our business, since Tejas offers state-of-the-art optical and data networking products which are used for building high-capacity networks to cater to the ever-increasing demand for bandwidth.

## Dear Shareholders,

FY2019-20 was a challenging year for our company in terms of revenues and profitability. Summary of our FY2019-20 financial performance is as follows:

- Consolidated revenue (net of taxes and component sales) were at ₹ 379.79 crore- YoY decline of 56.7%
- India revenues declined 63.5% YoY, while our international revenues declined by 30.8%
- Gross margins was 35.6% of our net revenues
- Profit After Tax was ₹(237.12) crore
- Working capital increased by 246 days to 452 days, primarily due to increased inventory.
- Our order book at the end of the year was ₹ 483 Cr, out of which around 40% is expected to be realized revenues in FY21.

The 57% y-o-y decline in FY20 revenues was primarily due to a major decline in India business, which had contributed 79% of total revenues in FY19. The impact of the capex slowdown in India on our revenues was further aggravated by the global outbreak of COVID-19 pandemic in Q4FY20, resulting in shipment delays for orders in hand and pushouts of few international orders to FY21.

The cash position of the company remains strong at ₹ 280 Cr cash with no debt, ensuring that we are adequately covered to meet our cash flows needs for growth over the medium term, even under adverse business conditions. With receivables of ₹ 456 Cr and

inventory of ₹ 252 Cr, we expect to improve our cash position during FY21. We will continue to focus on expense management in FY21, given the near-term uncertainties arising out of COVID-19.

While we expect volatility in our business in the near-term, the macro drivers of our business continue to be robust. With growing adoption of work-from-home, e-commerce and high-bandwidth video applications, data traffic on telecom networks has seen a surge. Telcos are expected to increase their investments in upgrading capacity of their access and backbone networks and also for increased fiberization- both to homes as well as cell towers (for 4G and 5G). COVID-19 has accelerated the demand for home broadband, especially in countries like India, that have less than 3% penetration for fixed broadband subscribers. Globally, the number of high-speed broadband connections (> 100 Mbps) is also expected to grow by 200% over the next three years, creating a strong demand for our optical and broadband access products.

## India Business

At a macro level, India continues to be a large and growing telecom market, with increased digitization of its economy and pent-up demand for data by consumer. In 2019, average customer consumed almost 10 GB data per month which is almost 40% more than North America and fifty times more than it did five years ago. Currently, with only 25% of cell towers in India fiberized and less than 3% homes having a high-speed broadband connection, the country is playing catch-up both in terms of optical network capacities as well as fiber coverage. With telecom seen as an essential service during the COVID-19 pandemic, there has been a 25% rise in broadband usage witnessed during the lockdown period, and this trend will accelerate the deployment of high-capacity and reliable broadband services.



The telecom network requirements of service providers in the developing economies of Asia and Africa closely mirror those of Indian telcos, thus enabling us to leverage our success in the Indian market to expand in these regions.

However, during FY2019-20, there were multiple factors that resulted in decline in capex in Indian telecom, which in turn adversely affected our India revenues. It started with hyper-competition, which caused financial stress on the telcos, which was followed by ruling on the AGR (adjusted gross revenues) issue by the Supreme court, that further strained the financials of the operators. In addition, Government spending in the form of capex for BSNL, investments in Bharatnet Phase-2 and execution of projects in utilities sector were also delayed, leading to an overall reduction of telecom capex in the country which in turn resulted in our India revenues declining 63.5% YoY.

Our India-Government business declined 88% year-on-year and constituted only 15% of our FY20 net revenues compared to 55% in FY19. Our India-Government business comprises two segments—business from BSNL/BharatNet and critical infrastructure business from utility companies (power, railways, oil and gas), smart cities and defence. In FY20, business from BSNL and Bharatnet was only 2% of the total net revenues and showed a year-on-year decline of 98%. Government of India has extended the deadline for completion of BharatNet in all 250,000 gram panchayats (up from 125,000) to FY21 and we expect some of the state-led BharatNet projects, to be executed in FY21. There was a 71% year-on-year decline in critical infrastructure business due to delays in project execution, while contributing 13% to our total revenues. In this segment, the company has won several new orders that will be executed in the coming year.

In FY20, India Private business declined by 6% year-on-year on account of slowdown in capex in second half of FY20 following the AGR judgement of Supreme Court of India. We are an incumbent supplier to all telcos in India, and expect to see an uptick in our business, based on our wins in new application areas. As telcos start increasing their capex in FY21 and beyond, especially to cater to the sharp rise in home broadband usage and enterprise connectivity, we should expect a growth in our business as well.

In the light of new geo-political developments, Government of India has stated its intent to become self-reliant in critical areas such as telecom and promote the use of trusted domestic products with policies like “Preference to Make in India”. COVID-19 has further highlighted the need for a secure, reliable telecommunications infrastructure in the country and to diversify supply-chain risks. As one of the leading domestic telecom equipment company, we expect to play a larger role in the domestic telecom eco-system.

### International Business

On a YoY basis, international direct business declined by 33% primarily due to COVID-19 related delays in order placement and fulfilment in Q4 of FY20. Our international revenues (including OEM business) constituted 33% of our total revenues in FY20. Presently, we are focusing on three international geographies—(a) South and South-East Asia (b) Africa and Middle East and (c) Americas. The three regions together, offer a US\$9.4 billion cumulative addressable market for our products in FY21, which is nearly 40% of the global telecom capex spend. The telecom network requirements of service providers in the developing economies of Asia and Africa closely mirror those of Indian telcos, thus enabling us to leverage our success in the Indian market to expand in these regions. Also, in the backdrop of recent geo-political developments post-COVID, we are being increasingly viewed as a neutral and safe alternate provider of world-class telecom equipment by our customers.

In FY20, Africa and Middle East (MEA) region registered healthy revenue growth of 20.1%. We signed up 3 new Tier-1 service providers in Africa and received significant repeat business from an existing Carrier of Carrier customer for their bandwidth capacity upgrades. We continued to make necessary investments to grow our footprint in the MEA region and have hired experienced senior sales leadership in the region. We have a strong funnel for FY21 from existing customers, since this region is witnessing strong investment activity in broadband networks and large-scale build-outs by web-scale companies.

Our revenues from the South and South East Asia region declined by 58.5% year-on-year due to push-out of orders by our customers in Malaysia, Bangladesh and Vietnam. During the year, we won our first order from a large Tier-1 win in Hong Kong. For FY21, we have a good order funnel from our existing customers.

Our sales activity in the Americas is mainly focused on USA and Mexico. FY20 revenues were largely derived from Mexico where we continued to win repeat orders from existing customers and also secured business from one of the country's leading enterprise service providers. Our USA business has shifted from OEM channels to direct channels. During the year, we strengthened our senior leadership team in the USA by appointing a Head-North America Sales and a CTO-North America. During the year, we made good progress by winning 6 new customers and appointing multiple system integrators as our channel partners to address Tier-3 accounts.

Telcos are expected to increase their investments in upgrading capacity of their access and backbone networks and also for increased fiberization- both to homes as well as cell towers

### Strategy

In terms of R&D and product strategy, we will continue to maintain our investments and stay focused on strengthening our product portfolio. We are seeing growing traction for our state-of-the-art optical, broadband and data networking products and will continue to make appropriate R&D investments to increase our product competitiveness, which is reflected in new application wins against global competitors.

On the sales front, for FY21, especially with possible travel restrictions due to COVID-19, our focus will be to broaden our customer-base in countries where we already have local presence. We will also focus on getting a larger walletshare from customers where we have incumbency, by winning new applications for our products. Our India business is expected to recover in the coming year, especially with a new focus on “Atmanirbhar Bharat” in the post-COVID scenario, which should benefit domestic telecom companies like us. The new geo-political developments are also motivating customers to diversify their sourcing and reduce their supply chain risks, and we are well positioned to benefit from this trend. We remain committed to reduce our country-concentration and expand our exports business, so as to achieve 50% of our revenues from international, in the medium term.

### Innovation and Awards

In FY20 we introduced TJ1600S/I, our latest packet and optical switching product at the India Mobile Congress (IMC), the biggest technology event of South Asia. TJ1600S/I is the world's largest disaggregated packet-optical switch that can be used in 5G core networks, interconnecting hyperscale data centers and for building multi-terabit backbone networks. We continued to be recognized for our technology innovations and excellence. TJ1400 UCB, the world's first ultra-converged broadband access/edge product that we had launched at the Mobile World Congress (MWC) in February 2019, was a finalist at “2019 Leading Lights Award (USA)” and “2019 Fierce Innovation Award (USA)”. Meanwhile Tejas continues to be a leading technology innovator in optical networking and broadband access with 349 patent applications, 116 global patent grants and a rich portfolio of 280+ semiconductor IPs. We are actively contributing to global 5G standards through our work in India's telecom standards organization (TSDSI), which is a full organizational partner of 3GPP.

### Our People and Community

We take great pride in our ability to attract and nurture highly skilled, knowledgeable and innovative individuals across all functions in the organization and in all countries where we operate. While there is intense competition for talent in our industry, our annual attrition rates have remained consistently below the industry average over last several years. This is also evident from the fact that many of our senior employees have been with the company for 10+ years and more than 25 employees from our original team from year 2000 are still with us.

As a responsible business, we support a wide range of societal initiatives by reputed partner organizations that positively influence the lives of people in our local communities in areas such as mid-day meals, healthcare and education. In FY20, we spent Rs 0.98 crore towards various Corporate Social Responsibility (CSR) projects in education, skill development and disaster relief. To address the challenges of COVID-19 pandemic, we donated Rs 11 Lacs to the Karnataka Chief Minister's Relief Fund (CMRF) and Rs 40 Lacs to support Akshaya Patra Foundation Bangalore, that runs the world's largest mid-day meal programme and is now providing food and ration as a part of our country's COVID-19 relief efforts.

### Looking Ahead

In May 2020, Tejas completed 20 years of our successful journey. Our company was established in 2000 with a vision to create a pioneering, global networking product company from India. Over these 20 years, we had a truly exciting journey and have created 45+ world-class products, successfully graduated from being a startup to a publicly listed company, shipped more than 500,000 systems to customers in 75+ countries while generating over US\$ 1 Billion in revenues and we are currently a top-10 vendor in the worldwide optical aggregation market.

Today, we are in the midst of the COVID-19 pandemic and are witnessing significant uncertainty and challenges in the near-term across all sectors. However, telecom is one of the few bright spots in this global landscape, since it is playing a critical role in ensuring that people and business stay connected. With work-from-home becoming the new normal and high-bandwidth video applications becoming more popular, data traffic on telecom networks has seen a massive surge and global telcos are expected to increase their investments in home broadband and upgrade capacities on their metro and backbone networks. The macro drivers of our business namely increasing data usage, growing fiberization, extensive build-outs of hyperscale data centers and 4G networks continue to remain strong. We look forward to capitalizing on these opportunities, especially in the new and ever changing geo-political situation.

I extend my sincere appreciation to the Board of Directors for their continued guidance and support. I also wish to thank all stakeholders, including our employees, customers and shareholders for their continuing faith in the company, especially in showing resilience during these challenging times. I am optimistic of the opportunities that are ahead of us and I look forward to taking our company to greater heights and achieving many more successes in the years to come.

Warm regards,

Bengaluru  
April 21, 2020

**Sanjay Nayak**  
CEO and Managing Director