



Annual Report 2021-22

# Charting New Frontiers with Next-Generation Telecom Networks

# Table of Contents

## Table of Contents

Corporate Overview	3-55
--------------------	------

### Statutory Reports

Board's Report and Annexures	56-93
Management's Discussion and Analysis	94-109
Corporate Governance Report	110-127
Shareholders' Information	128-134
Risk Management Report	135-139
Business Responsibility Report	140-147

### Financial Statements

Standalone Financial Statements	148-199
Consolidated Financial Statements	200-250

Notice of the Annual General Meeting	251-269
--------------------------------------	---------

### 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.



# About Us



## WHO WE ARE

We are India's leading R&D-driven telecom and networking product company, founded in 2000, with over 900 employees. Tejas is India's first deep-technology product company to be publicly listed in the Indian Stock Exchanges. We are a part of the Tata Group, with Panatone Finvest Ltd. (a subsidiary of Tata Sons Pvt. Ltd.) being the majority shareholder.



## WHAT WE DO

We design and manufacture high-performance wireline and wireless networking products for telecommunications service providers, internet service providers, utilities, defence and government entities in over 75 countries.



## OUR VISION

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



## OUR MISSION

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

## KEY HIGHLIGHTS OF FINANCIAL YEAR 2021-22

Panatone Finvest Limited  
(subsidiary of Tata Sons)  
acquires a majority stake  
in Tejas Networks

### ORDER BOOK



at an all-time high of  
**Rs 1175 crores**  
(YoY increase of 73%)

Tejas Networks announces  
acquisition of Saankhya  
Labs (P) Ltd. to enhance  
its wireless products  
offering

### SUCCESSFUL INDIGENOUS 4G OFFERING

Tejas Networks delivered  
4G Radio Access Network  
equipment (Base Stations)  
for this initiative

# Snapshot of FY 2021-22

Based on Ind AS Consolidated Financial Statements

In ₹ Crore

Particulars	FY 2022	FY 2021	Change(%)
<b>Financial Performance</b>			
Revenue (net of taxes and component sale)	550.59	514.82	7
Gross Profit	174.00	212.13	(18)
Operating profit/(loss) after depreciation	(157.24)	2.81	(5696)
Profit/(loss) before tax	(117.13)	22.52	(620)
Profit/(loss) after tax	(62.71)	37.54	(267)
EPS (par value of ₹ 10 each) : Basic	(5.97)	4.05	(247)
Diluted	(5.97)	3.99	(250)
Particulars	FY 2022	FY 2021	Change
<b>Financial Position</b>			
Cash and cash equivalents <sup>(1)</sup>	1,102.18	364.43	737.75
Net current assets <sup>(2)</sup>	480.34	447.38	32.96
Fixed assets (including assets under development) <sup>(3)</sup>	162.90	119.40	43.50
Total Assets	2,110.12	1,311.88	798.24
Total Equity	1,930.25	1,134.20	796.05
Net cash inflow/(outflow) from operations	(17.33)	157.65	(174.98)
Free cash inflow/(outflow)	(134.68)	75.13	(209.81)
DSO (days)	174	259	(85)
DPO (days)	102	115	(13)
Inventory Days	166	134	32
Net working capital (days)	293	281	12

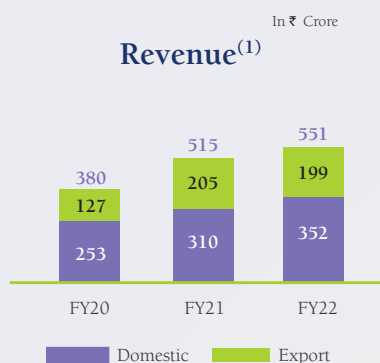
<sup>(1)</sup> Cash and cash equivalents include fixed deposits under other bank balances, deposits with financial institutions and, investment in mutual funds.

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

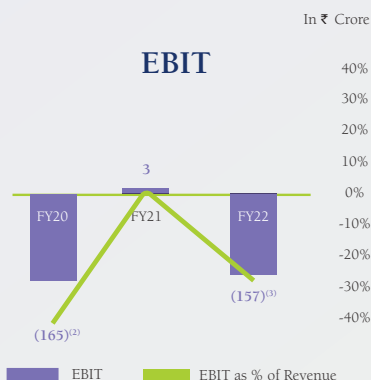
<sup>(3)</sup> Excludes right of use assets.

# Financial Trends

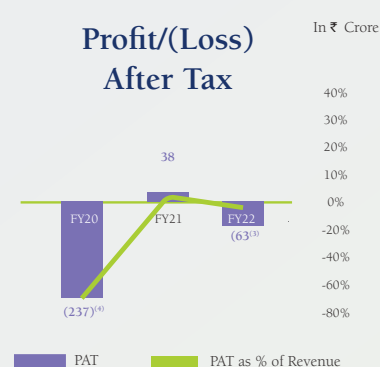
Revenue<sup>(1)</sup>  
In ₹ Crore



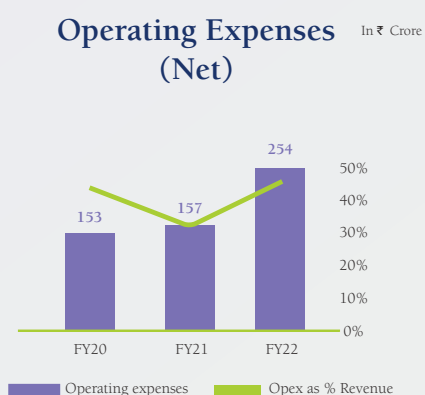
EBIT  
In ₹ Crore



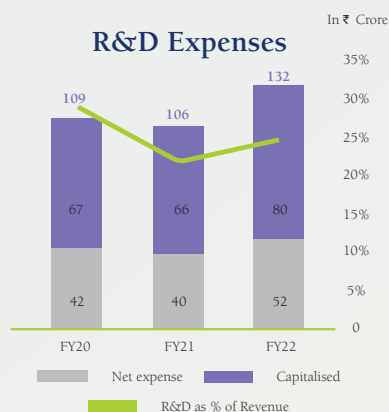
Profit/(Loss)  
After Tax  
In ₹ Crore



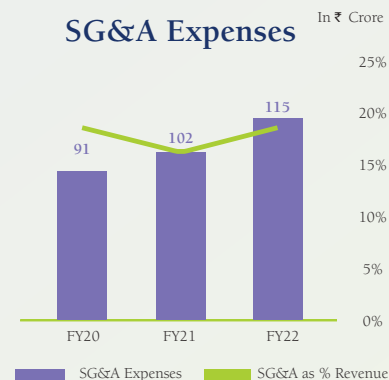
Operating Expenses  
(Net)  
In ₹ Crore



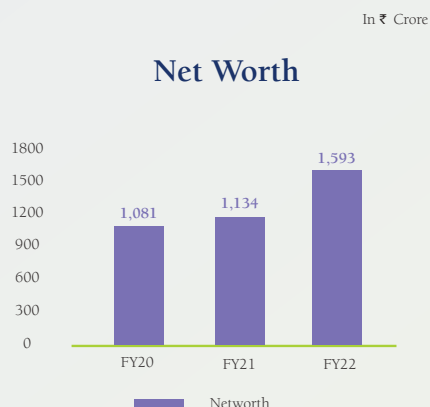
R&D Expenses  
In ₹ Crore



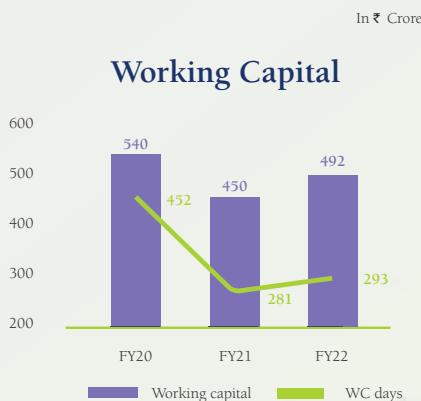
SG&A Expenses  
In ₹ Crore



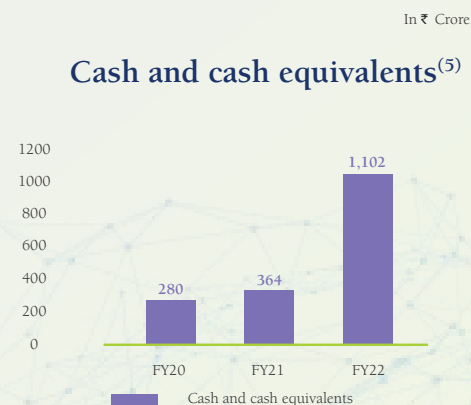
Net Worth  
In ₹ Crore



Working Capital  
In ₹ Crore



Cash and cash equivalents<sup>(5)</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 allowance for expected losses of ₹ 74 Crore, due to the continual delay in collecting the amount on account of the long outstanding receivable from one PSU customer.

<sup>(4)</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>(5)</sup> Cash and cash equivalents include fixed deposits under other bank balances, deposits with financial institutions and investment in mutual funds.

# Chairman's Message



Dear Shareholders,

More often than not great opportunities come our way disguised as impossible situations. While the pandemic brought tremendous personal loss, economic hardship and a host of other challenges for the world, it also pushed consumers, businesses and governments over the proverbial tipping point in their adoption of broadband and digital technologies. Notwithstanding the short-term supply chain challenges and Covid-19 related uncertainties that we faced throughout the year, your company continued to stay resilient, thanks to the strong commitment and support from our employees, customers and communities. FY22 was a year of renewed commitment towards our aspiration to become a trusted telecom products company.

I'm very pleased that Tejas Networks is now part of the Tata group. As a values-driven business group with a strong commitment to nation-building, for over a century the Tata group helped propel our country into the rank of industrialized nations through its foray into core businesses. The Tata group has always entered businesses or supported initiatives which are considered important and necessary for our country. In line with this philosophy, the group has recognized the need for having an indigenous telecom stack and is working towards orchestrating a modern solution for the telecom industry at large. In doing so, the objective is to build a world class telecom OEM, capitalizing on the end-to-end group capabilities in software and system integration, design and manufacturing of electronic sub-systems and telecom equipment, in which your company will serve as the centerpiece.

Globally over the last few years, especially with the onset of the Covid-19 pandemic, always-on broadband connectivity to homes and businesses has emerged as an essential service like electricity, gas, and water. This opportunity, coupled with Government of India's vision for 'Atmanirbhar Bharat' with policies like PMI (Preference to Make in India), PLI (Production Linked Incentives) and the Trusted Sources Mandate, provides the right environment for design and development of indigenous technology and use of domestically manufactured telecom products like ours.

In FY22, I am happy to inform that your company was declared eligible under the PLI scheme as well as the Trusted Sources mandate, which would help in growing our domestic market share in both public and private sector procurements.



Tejas is poised to be a scale player of global reach with a competitive portfolio of products supported by best-in-class R&D and innovation. India is a large home market for us, which will give us the volumes and economies-of-scale. We will build from there and target to expand our international presence by offering modern, efficient and innovative telecom network equipment.

As a part of our strategy to build a competitive end-to-end portfolio of products, your company has now entered the 'wireless' product segment in addition to the 'wireline' segment which has been our strength thus far. As a part of this initiative, we have already launched and demonstrated an end-to-end indigenous 4G/LTE network for a leading telecom service provider in the country and we will soon be ready for deploying equipment for 5G as well. This strategy is further strengthened by the acquisition of Saankhya Labs Pvt Ltd., which enables your company to be a strong player in the 'broadcast' domain and become an active player for wireless, broadband and broadcast segments, as the industry enters the 'convergence' era.

In summary, your company is poised to be a scale player of global reach with a competitive portfolio of products supported by best-in-class R&D and innovation. India is a large home market for us, which will give us the volumes and economies-of-scale. We will build from there and target to expand our international presence offering modern, efficient and innovative telecom network equipment. This would entail us building a strong manufacturing ecosystem in India, an agile back-office and support operation, backed by world-class team and processes.

I take this opportunity to sincerely thank all the Board members for providing their valuable guidance and support to your Company. In particular, I would like to express my gratitude and appreciation for the past Chairman, Balakrishnan V and Dr. Gururaj Deshpande, under whose able leadership the Company has been able to achieve all the success over the years and build a strong platform for future.

On behalf of the Board of Directors of Tejas Networks, we thank the respective Governments, nodal agencies of India, the Government of Karnataka, and 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.

I wish you all good health and glad tidings.

Warm regards,

Bengaluru  
June 28, 2022

**N. Ganapathy Subramaniam**  
Chairman



# CEO and MD's Statement



Dear Shareholders,

FY2021-22 was a landmark year for us, during which we took a new strategic direction and have now become a part of the Tata Group. During the year, Tata Sons Private Limited, through its wholly-owned subsidiary Panatone Finvest Limited, acquired a majority stake in Tejas Networks. This marks a significant milestone for us, since we now have the requisite resources, a trusted brand and capabilities to truly realize the vision of building a top-tier global telecom equipment company from India.

During the year, while we witnessed a strong demand for our products and solutions in the form of new order wins, our revenue growth was relatively modest due to global chip shortages that impacted our manufacturing operations. The shortfall in our revenues, in turn adversely impacted our profitability. Summary of our FY2021-22 financial performance is as follows:

- Net revenues were at ₹ 551 Crore- YoY growth of 6.9%
- Profit After Tax was (₹ 63) Crore
- Net Working Capital increased to ₹ 492 Crore, primarily due to increased inventory.
- Our order book and the end of the year was ₹ 1175 Crore, out of which around 70% is expected to be realized revenues in FY23.

In FY22, the global chip shortage emerged as a key challenge for the entire telecom equipment industry and despite our taking advance actions for high-value chips, we could not deliver as per plan due to increase in lead times and non-availability of components. Since component shortages and supply chain disruption are likely to continue even during FY23, we have already taken advance inventory ordering actions to fulfill our strong order book and be ready to address the growth opportunities ahead of us. We continue to work closely with our chip suppliers, who believe in our potential to be a large global OEM from India, and are willing to give us appropriate priority in their component allocation in the current constrained environment.

The cash position of the company remains strong at ₹ 1,102 Crore cash and cash equivalents with no debt, ensuring that we are adequately covered to invest and meet our aggressive growth plans over the next few years.

## Technology and Products

Being in the technology business, we continued to maintain our focus on R&D and innovation, to ensure that we invest to build globally competitive products. During the year we invested 24% of our revenues (on fully expensed basis) on R&D, making us one of the top spenders of R&D amongst listed companies in India. In the wireline segment, in order to cater to the ever increasing demand for carrying high-speed data, we



strengthened our optical transport portfolio with 400G/600G speed interfaces, which enable our customers to build multi-terabit backbone networks. To cater to the demand of high-speed home broadband, we have enhanced our FTTX (Fiber To the Home) products based on GPON and XGS-PON technologies, both for the OLT as well as the ONT devices. We also continued to invest in building secured switches for applications such as smart cities, safe cities and other critical infrastructure.

On the wireless side, we upgraded our 4G LTE Radio Access Network (RAN) base station product to meet the technical requirements of a large pan-India mobile operator in India. We successfully completed the Proof-of-Concept (PoC) and are well positioned to win large orders in the coming years. We see the 5G as a large opportunity for growing our business, since there will be significant network rollouts by telecom operators as well as enterprises. Our 4G LTE base station has been designed to be upgradable for 5G.

As a part of our strategy for accelerating our wireless product development, we announced the acquisition of Saankhya Labs Pvt Ltd., a Bangalore based startup, on March 30th, 2022. Saankhya Labs is synergistic to our business and expands our offering in 5G Open RAN (O-RAN), 5G broadcast and satellite applications. Saankhya also has strong chip design expertise and have developed their own chip, which is used for satellite and wireless equipment. Our wireless product development efforts will get strengthened by the addition of over 250 highly skilled R&D engineers from Saankhya, having experience in wireless system design, hardware, software as well as chip design. Saankhya's 73 patents coupled with their in-house hardware and software IPR will also enhance our IPR portfolio.

### India Business

In FY22, business from Indian customers, including both government and private sector clients, contributed 64% of our net revenues compared to 60% in FY21. India-Government business grew 8.7% year-on-year (YoY) and contributed 17% of our net revenues of which business from BSNL/MTNL constituted 5% while critical infrastructure business the remaining 12%. In FY22, we had multiple tender wins in BSNL and MTNL for our wireline products namely, DWDM and GPON. We successfully completed 4G RAN proof of concept (POC) testing for BSNL's 4G tender where we are participating as a consortium partner along with TCS and CDoT. We continued to maintain strong momentum in our critical infrastructure segment with multiple new orders from power, railways, oil & gas sectors.

In FY22, India-Private business contributed 47% of our net revenues with a YoY growth of 14.9%. We are an incumbent supplier to all major telcos in India and expect to see an uptick in our FY23 business, based on our wins in new applications areas such as FTTX, OTN/DWDM and PTN. In FY22, we were selected by Airtel as a DWDM equipment supplier for their backhaul

capacity upgrades as they prepare for 5G rollouts and as a GPON equipment supplier for their fiber broadband deployments. We registered several wins with our system integration partners for our Ethernet switches in smart/safe cities, campus network and bank connectivity opportunities.

With 5G spectrum auctions to be completed during 1H2022, we expect to see a multi-year capex spend cycle for building both wireline and wireless infrastructure. Besides deployments of next-generation radio products, 5G will also require significant increase in cell-site fiberization and augmentation of optical backbone capacities which augur well for our business.

We are witnessing strong positive tailwinds from "Atmanirbhar Bharat" policies in India's telecom sector. In FY22, the company was approved under the PLI scheme for Telecom and Networking products. In terms of meeting security requirements, all our products have been approved under the Trusted Sourcing norms defined by Government of India. Going forward, with Government of India's increasing thrust on the use of trusted products in both public and private networks, as well as design-led manufacturing, we believe that our company with world-class, indigenously designed products will have a great opportunity to play a key role in the "Atmanirbhar Bharat" mission for telecom.

### International Business

On a YoY basis, international business declined marginally and contributed 36% of our net revenues in FY22 compared to 40% in FY21. Broadly speaking, our international sales are generated from four regions; (a) Africa and Middle East, (b) South and South-East Asia, (c) Europe and (d) Americas. 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.

In FY22, we continued to gain traction in DWDM, OTN and FTTX segments in Africa and Middle East region which is witnessing strong investment activity in broadband networks and large-scale build-outs by web-scale companies. Besides winning large business from a single pan-Africa Carrier of Carriers, the company also signed-up multiple customers in the West Africa region including a new Tier-1 operator in Nigeria. Our FY22 revenues from the South and South East Asia region declined on account of weak order flow as multiple RFPs got pushed out to next fiscal year. In FY23, we are well positioned for expansion opportunities in existing accounts for our wireless and optical products. Our sales activity in the Americas is mainly focused on USA and Mexico. There was an uptick in our USA business as we signed up a large Tier-1 OEM for our MSPP products while Mexico saw reduced order flow. In Europe we registered our first multi-million dollar win for our DWDM and FTTX products. We have multiple ongoing customer engagements in Europe primarily targeting high-speed broadband rollouts and a growing demand for trusted telecom equipment in certain countries.

In the backdrop of recent geo-political developments post-COVID, we are increasingly being seen as a competitive and trusted alternate for providing world-class telecom equipment to our customers. Going forward in FY23, the company plans to further build on this momentum by leveraging our reference customer base, Tata brand and a stronger balance sheet to win larger deals.

### Innovation and Awards

We continued to build our reputation as a technology innovator in the telecom sector with 350 patent applications, 137 global patent grants and a rich portfolio of 300+ semiconductor IPs. In FY22, our TJ1600 multi-terabit packet-optical transmission product family won the “Voice and Data excellence award for innovation”. The company was also a finalist for the 2021 Asia Communication Award (ACA) in the innovation category. It was a matter of pride that Tejas won the prestigious “CEO of the Year” and “CTO of the Year” awards from ET Telecom.

### Our People and Community

We are very happy to report that during the year, our employees seamlessly transitioned to a hybrid working model, without sacrificing on productivity. We also provided all possible support to our employees and their families, in fighting the second wave of the Covid-19 pandemic in India. Our efforts ranged from sponsoring organizations who were distributing oxygen concentrators, providing funding support to build COVID units in local hospitals and arranging vaccination camps for employees and their families at all our offices around the country.

Globally, the Covid-19 pandemic has brought about a sense of urgency to addressing significant social and environmental challenges and the need for sustainable development. Our company too is adopting global best practices in Environmental, Social and Governance (ESG) areas to ensure long-term value creation for all stakeholders. From a Corporate Social Responsibility (CSR) perspective, we continued to support reputed partner organizations such as IIIT-Bengaluru, ELCIA, Sri Aurobindo Society that are working in the area of education and skill development.

As an R&D-driven company, hiring and retaining premier technical talent is critical to the company's long-term success. In FY22, the company launched the “Tejas Academy” with a charter to attract and train high-potential young engineers from across the country, in relevant technology domains through a combination of classroom lectures, live projects, self-learning content, mini-assignments and 1:1 mentorship. While there is an intense war for talent in our industry, 50% of our employees have been with the company for 10+ years which is a reflection of our positive organizational culture, quality of work, employee empowerment, learning opportunities and a competitive compensation.



As a Tata Group company, with a widening product portfolio and an expanding array of opportunities, I feel confident that the company's next phase of growth will be both exciting and rewarding for all of us.

### Looking Ahead

Over the last 22 years ago, we have built a solid foundation for our company, on the strengths of our highly-talented and committed team, a portfolio of innovative and competitive world-class products and significant customer success. We have built a strong reputation and trust as India's leading R&D-driven telecom equipment OEM.

On May 18<sup>th</sup>, 2022, N. Ganapathy Subramaniam was appointed as the new Non-Executive Chairman of our Board, succeeding Balakrishnan V, who decided to step down. I extend my sincere appreciation to the Board of Directors for their continued guidance and support while expressing my gratitude to Balakrishnan for the significant role he played in helping the company graduate from being a startup, to India's first publicly listed deep-technology telecom product company. I also wish to thank all stakeholders, including our employees, customers and shareholders for their continued faith in our vision and supporting us in our endeavours.

As a Tata Group company, with a widening product portfolio and an expanding array of opportunities, I feel confident that the company's next phase of growth will be both exciting and rewarding for all of us.

With Warm Regards,

Bengaluru  
June 28, 2022

Sanjay Nayak  
CEO and Managing Director