

## ANNUAL REPORT 2022-23

# Building Next-Generation Telecom Networks for India and the World



# TABLE OF CONTENTS

I. Corporate Overview	02-46
-----------------------	-------

## II. Statutory Reports

a. Board's Report and Annexures	47-83
b. Management Discussion and Analysis	84-101
c. Corporate Governance Report	102-121
d. Shareholder's Information	122-128
e. Risk Management Report	129-133
f. Business Responsibility & Sustainability Report	134-164

## III. Financial Statements

a. Standalone Financial Statements	165-216
b. Consolidated Financial Statements	217-273

III. Notice of the Annual General Meeting	274-299
---	---------

### 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 the Company



## WHO WE ARE

Founded in 2000 and headquartered in Bengaluru, Tejas is India's largest R&D-driven telecom equipment company, founded by technocrats, which successfully grew from being a startup to become India's first deep-technology product company to be publicly listed.



## WHAT WE DO

We design and manufacture high-performance wireline and wireless networking products for telecom 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.

## FINANCIAL YEAR 2022-23 HIGHLIGHTS

**Highest Ever Net  
Revenue of ₹ 920 Crore  
YoY growth 67%**

**Highest Ever Order Book  
of ₹ 1,934 Crore  
YoY growth 65%**

**Won ₹ 696 Crore Order to  
Supply IP/MPLS Routers for  
a Pan-India Network**

**Added 4G/5G RAN to  
Complement our Optical and  
Broadband Products**



# Snapshot of FY 2022 - 23

Based on Ind AS Consolidated Financial Statements

in ₹ Crore except per share data

Particulars	FY 2023	FY 2022	Change(%)
<b>Financial Performance</b>			
Revenue from operations	919.57	550.59	67%
Gross Profit <sup>(1)</sup>	239.42	174.00	38%
Operating profit/(loss) after depreciation and amortization <sup>(1)</sup>	(105.57)	(157.24)	33%
Profit/(loss) before tax	(42.65)	(117.13)	64%
Profit/(loss) after tax	(36.41)	(62.71)	42%
EPS (par value of ₹10 each) : Basic	(2.46)	(5.97)	59%
Diluted	(2.46)	(5.97)	59%
<b>Particulars</b>	<b>FY 2023</b>	<b>FY 2022</b>	<b>Change</b>
<b>Financial Position</b>			
Cash and cash equivalents <sup>(2)</sup>	1,306.36	1,102.18	204.18
Net working capital <sup>(3)</sup>	934.59	480.34	454.25
Fixed assets (including assets under development) <sup>(4)</sup>	544.30	162.90	381.40
Total Assets	3,602.03	2,110.12	1,491.91
Total Equity	2,972.96	1,930.25	1,042.71
Net cash inflow/(outflow) from operations	(380.14)	(17.33)	(362.81)
Free cash inflow/(outflow)	(629.26)	(134.67)	(494.59)
DSO (days) <sup>(5)</sup>	161	234	(73)
DPO (days) <sup>(6)</sup>	81	113	(32)
Inventory Days <sup>(7)</sup>	301	289	12

FY23 includes Saankhya Labs Private Limited and its subsidiaries from July 01, 2022 (for nine months).

<sup>(1)</sup> Refer note no.32 of consolidated financial statements

<sup>(2)</sup> Cash and cash equivalents include fixed deposits classified under other bank balances, deposits with financial institutions and investment in mutual funds. Cash and cash equivalents increased on account of receipt of ₹ 837.50 crore and ₹ 1,012.50 crore from Panatone Finvest Limited during the FY22 and FY23 respectively towards subscription of share capital.

<sup>(3)</sup> Excluding the current assets considered in cash and cash equivalents.

<sup>(4)</sup> Excluding right of use assets and goodwill and for FY23 includes an amount of ₹ 220.47 crore of technical know-how pursuant to acquisition of controlling interest in Saankhya Labs Private Limited, as part of Purchase Price Allocation (PPA)

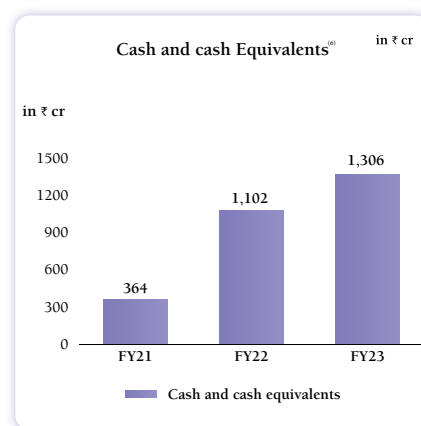
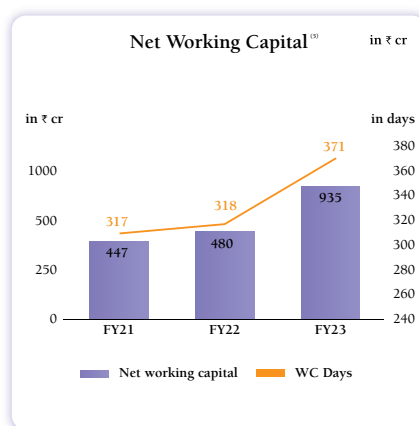
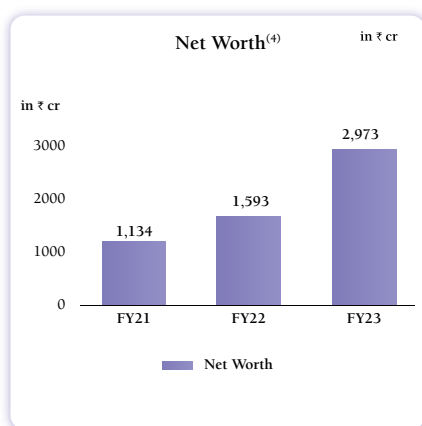
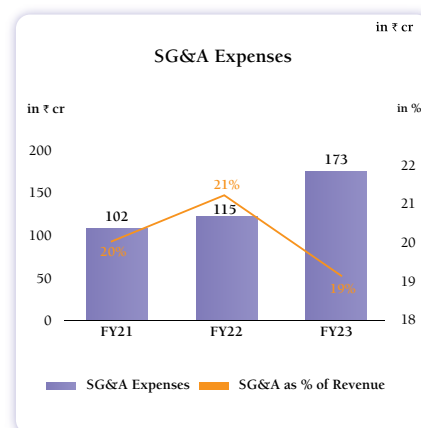
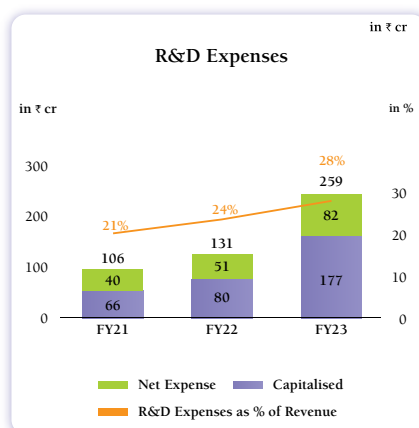
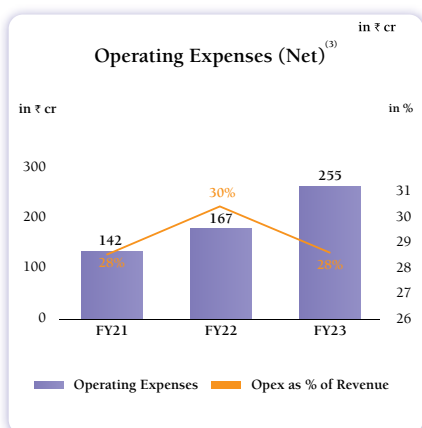
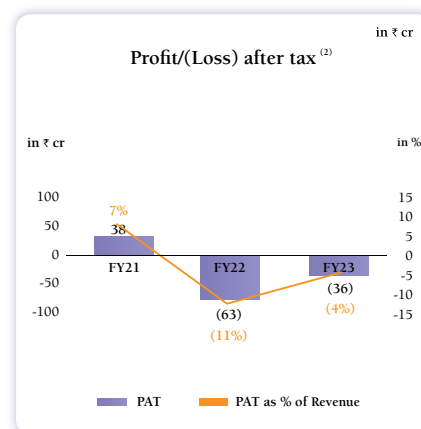
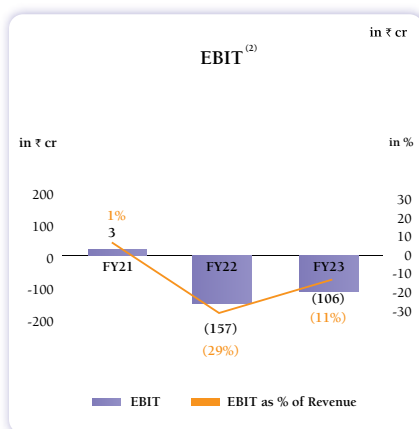
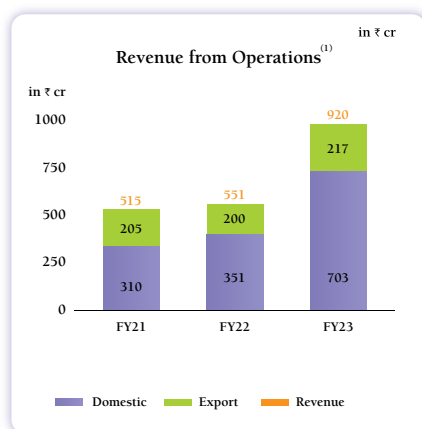
<sup>(5)</sup> DSO = Average receivables / Revenue from operations\*365

<sup>(6)</sup> DPO = Average trade payables / Purchases\*365

<sup>(7)</sup> Inventory days = Average inventory / Cost of material consumed\*365



# Financial Trends



FY23 includes Saankhya Labs Private Limited and its subsidiaries from July 01, 2022 (for nine months).

<sup>(1)</sup> Revenue for FY21 is net of component sales amounting to ₹ 11.78 crore

<sup>(2)</sup> Includes the impact of allowance for expected credit loss of ₹ 88 crore for FY22 and reversal of ₹ 33 crore for FY23

<sup>(3)</sup> Excludes allowance for expected credit loss

<sup>(4)</sup> Net worth for FY22 excludes ₹ 337.50 crore of money received against share warrants.

<sup>(5)</sup> Net working capital days = Net working capital (excluding current assets considered in cash and cash equivalents) / Revenue from operations \* 365

<sup>(6)</sup> Cash and cash equivalents include fixed deposits classified under other bank balances, deposits with financial institutions and investment in mutual funds. Cash and cash equivalents increased on account of receipt of ₹ 837.50 crore and ₹ 1,012.50 crore from Panatone Finvest Limited during the FY22 and FY23 respectively towards subscription of share capital.

# Message from the Chairman

**N. GANAPATHY SUBRAMANIAM**

Non-Executive Chairman &  
Non-Independent Director



Being a global telecom OEM requires deep technology expertise across multiple domains, strong

balance sheet, long-term investment outlook and deep customer relationships. I am happy to state that all these ingredients for success are available to your company.







Dear Shareholders,

I am filled with pride as I write this brief letter to you, as your Chairman.

During FY23, we navigated many tough issues on supply chain, continued our investments in the wireless product development that ended the year with good top line growth and a strong order book. Integration of Saankhya Labs with Tejas is progressing well, as we are embarking on a transformation agenda for your company. This transformation would lead to your company becoming a telecom OEM of significance by (a) building reliable and high-performing telecom equipment, (b) the products are differentiated by being software driven and (c) with a strong sense of innovation towards our sustainability goals.

Being a global telecom OEM requires deep technology expertise across multiple domains, strong balance sheet, long-term investment outlook and deep customer relationships. I am happy to state that all these ingredients for success are available to your company. Besides, we need to be moving beyond compliance to standards and establish a strong innovation and research capability to foresee the future and contribute to international standards.

Your company has successfully developed a comprehensive portfolio of end-to-end optical, GPON/XGS-PON and 4G/5G products, which are installed internationally and have won many global awards for innovation. I am pleased to report that your company acted with agility, took supply chain decisions, made changes to our processes and systems to maximize our capacity to deliver and set the platform for future growth. In FY23, your company was declared eligible under the design linked PLI scheme and we have committed to make an investment of ₹ 750 crore over the scheme period.

As you all are aware, we have been conducting trials with Bharat Sanchar Nigam Limited (BSNL) for our 4G/5G Radios. The products have been well tested in a real network landscape for some of the exacting KPIs related to coverage, capacity and experience of a mobile network. We are playing our part as a consortium partner to deliver on the opportunity of powering one of the most modern 4G/5G mobile networks in the country. This will certainly create international opportunities as well which will enable the company to gain global economies of scale to compete effectively in India and abroad. This will no doubt put enormous onus on us – the Tejas team– and we are gearing ourselves to scale our operations along multiple dimensions.

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. We are grateful to all our customers, employees, shareholders, suppliers, and bankers, for their consistent and tireless support even in the most challenging times.

We are truly excited about our prospects and are confident that as we execute on our strategy, we will continue to deliver positive outcomes for all our stakeholders in the coming years.

Warm regards,

**N. Ganapathy Subramaniam**  
Chairman

Bengaluru  
April 21, 2023





# From the CEO and MD's Desk



## **SANJAY NAYAK**

CEO & Managing Director



In FY23 we delivered solid operational performance and closed the year with the highest-ever annual revenues in our history. During the year, we witnessed strong business momentum resulting in an all-time high Order Book of ₹1,934 Crore.







Dear Shareholders,

In FY23 we delivered solid operational performance and closed the year with the highest-ever annual revenues in our history. During the year, we witnessed strong business momentum resulting in an all-time high order book of ₹1,934 crore. Coupled with a good visibility of new wireline and wireless orders in the pipeline, we expect to significantly accelerate our revenue growth in FY24 and beyond. The summary of our FY23 financial performance, including the consolidated accounts of Saankhya Labs (for nine months), is shown below.

- Net Revenue was at ₹ 919.6 crore; YoY growth of 67%
- Loss After Tax was ₹ 36.4 crore
- Net Working Capital increased to ₹ 935 crore, mainly due to increased inventory levels
- Our Order Book at year-end was ₹ 1,934 crore, mainly driven by optical product wins.

While lead time challenges continue for certain semiconductor components, the company made significant improvements in its supply chain processes to deliver four consecutive quarters of quarter-on-quarter and year-on-year revenue growth during FY23. While continuing with our model of asset-light manufacturing, we significantly expanded our manufacturing capacity by signing up four new EMS (Electronics Manufacturing Services) partners in India, so that we are well geared to successfully execute on our aggressive growth of orders for FY24 and beyond.

The cash position of the company remains strong at ₹ 1,306 crore in cash and cash equivalents with no debt. With our strong balance sheet, we are confident on our ability to execute large orders and scale-up our business over the next few years. In FY23, our company had acquired 64.40% of Saankhya Labs and for the balance 35.60% equity shares we filed for the amalgamation through the National Company Law Tribunal (NCLT) process, which is currently underway.

### Technology and Products

Being in the technology business, we continued to maintain our focus on R&D and innovation, to ensure that we invest and build globally competitive products. During the year we invested 28% of our revenues (on fully expensed basis) on R&D, while increasing our R&D headcount by more than 60%. We have significantly expanded our product portfolio, which now consists of optical and packet transport, fiber access (FTTX), as well as wireless (4G/5G/SATCOM) products, which can be used to build an end-to-end telecom network.

During the year, we made significant progress on our wireless program for developing 4G and 5G products. Our focus has been on building world-class RAN (Radio Access Network) products and we are collaborating with other ecosystem partners in India (TCS and C-DOT) to deliver an end-to-end 4G and 5G stack. We now have a diverse range of high-power 4G/5G radio units, operating in multiple frequency bands, supporting both TDD and FDD multiplexing technologies, while delivering advanced features. Tejas is currently one of the few telecom equipment companies in the world to offer both 3GPP and O-RAN compliant products for 5G RAN.

In the wireline segment, we have a very strong end-to-end portfolio of products ranging from access, aggregation to the core which can serve many applications from Gigabits to Terabits speeds. In order to cater to the ever-increasing demand for carrying high-speed data over longer distances, we are enhancing our optical networking products to support long-haul transmission, 1.2 Tbps capacity per wavelength and multi-terabit OTN switching. Similarly, we are upgrading our FTTX products based on GPON/XGSPON technologies to support 25G and 50G speeds making it ideal for non-residential applications such as enterprise broadband and 5G fronthaul. We are also making significant investments in developing higher-capacity packet switching and routing products based on IP/MPLS technologies with associated software protocols to address the needs of next-generation access, campus and metro networks.

### India Business

In FY23, we had strong growth momentum in our India business which contributed 76% of our revenues, compared to 64% in FY22. India-Government business grew 158.2% YoY and contributed 26% of our net revenues of which business from BSNL/BBNL constituted 8% while critical infrastructure business the remaining 18%. Besides winning orders for our optical products, in FY23, we won against top-tier global router vendors and received a large order of ₹ 696 crore from BSNL, for a pan-India IP/MPLS based Access and Aggregation Network (MAAN). This is the single largest order we have received till date in our company's history.

For our wireless 4G RAN equipment, we successfully completed a rigorous Proof-of-Concept (PoC) trial in India and also completed equipment supplies for initial 200 sites, as a part of a large pan-India 4G network. The significant progress we made in field-hardening this complex technology along with our proven manufacturing operations, sets us up in a very strong footing, as we prepare to roll out a global-scale wireless network during FY24.



We continued to witness strong momentum for our wireline products in the critical infrastructure segment, namely, power, railways, oil & gas and defence, that requires a wide range of secured, trusted products.

In FY23, India-Private business contributed 50% of our net revenues with a YoY growth of 79.3%. We continued to supply our GPON and DWDM products to a leading Tier-1 operator and were selected for multi-city enterprise GPON and PTN applications by two leading ISPs in the country. We registered several wins with our system integration partners for our Ethernet/IP switches in video surveillance, smart cities, campus networks, connectivity of banks, and other security-sensitive business verticals.

We expect India business to continue to be a large majority of our revenues over the next 2-3 years. We see a strong capex cycle for telecom equipment, fuelled by ongoing 5G rollouts, increase in fiber-broadband penetration and increased focus by the Government on connectivity in rural areas.

Given the strategic importance of a secure telecom infrastructure, Government of India has a strong focus on achieving “Atmanirbharta” (self-reliance) in telecom equipment - both for wireless as well as wireline segments. In the new global geopolitical situation, there is a large business opportunity for Indian telecom equipment vendors like us to become large exporter of trusted telecom products to the world. Through its proactive policy interventions, Government of India is committed to growing this sector. We expect to benefit from policies such as PMI (Preference to Make in India), Design-linked PLI (Production Linked Incentive), TTDF (Telecom Technology Development Fund) and National Cyber Security Coordinator’s (NCSC) Trusted Sources directives. In FY23, the company has been approved under Government of India’s Design Linked Incentive (DLI) for Telecom and Networking products with an investment commitment of ₹ 750 crore over the scheme period. Besides this, our company and our products have been approved under NCSC’s Trusted Sourcing norms.

### International Business

On a YoY basis, international business grew by 8.5% and contributed 24% of our net revenues in FY23 compared to 36% in FY22. Given our manufacturing and delivery challenges due to semiconductor component shortages, we were not in a position to sign-up many new customers and we could not expand our international revenues. However our differentiated offerings such as 100G/200G+ alien wavelengths, micro-OTN with edge grooming, multi-terabit OTN cross-connects and dense circuit emulation continued to gain good traction among our incumbent customer base. One of Africa’s largest Carrier of Carriers has provisioned hundreds of 100G/200G alien wavelengths across the continent using Tejas TJ1600 to upgrade their legacy 10G DWDM infrastructure.

Going forward, we see very strong growth opportunities in the international markets. The recent geopolitical developments have motivated customers to move away from vendors from a certain country, given the security concerns and the need for diversifying their supplier base. This is resulting in large-sized “rip-and-replace” opportunities where we can be a very credible alternative and a source of trusted, reliable, high quality, technically-sound and cost-competitive products. Your company will try and capture this opportunity by leveraging the Tata brand and their deep relationships with large global telecom service providers.

### Innovation and Awards

In FY23, we reconfirmed our status as a leading innovator in the telecom industry and were widely recognized for our product and business excellence. As of March 31st 2023, Tejas and Saankhya had cumulatively filed 445 global patent applications and owned a rich portfolio of 330+ semiconductor IPs.

We continued to push significant innovation in our products. Our flagship product, TJ1400 UCB, was selected as the “Broadband Innovation of the Year” at the sixth Mobile Breakthrough Awards in California, USA from over 2700 global nominations. TJ1400 UCB was also recognized as the “Best Made in India Telecom Innovation” at the 2022 India Mobile Congress. TJ1400 UCB is a unique product that converges multiple functions such as 4G/5G RAN, GPON/XGS-PON OLT for fiber-broadband access and MPLS-TP/IP/MPLS based 4G/5G backhaul in a compact shelf.

India’s leading telecom publication, Voice and Data, honoured our contribution to developing and commercializing India’s first indigenous 4G telecom stack by jointly conferring the “Telecom Person of the Year” award to Tejas, TCS, C-DOT and BSNL.

### Our People and Community

As an R&D-driven company, hiring and retaining premier technical talent is critical to the company’s long-term success. In FY23, we continued to accelerate hiring across all key functions to support our growth plans. As of March 31st 2023, on a standalone basis, the company had 1305 employees on its rolls which is a 41% increase over the last fiscal. Over 60% of our employees are in R&D with an average industry experience of 8.5 years and nearly 30% have advanced degrees in engineering. In FY22, the company had launched an in-house “Tejas Academy”, a boot-camp based approach to attract and train high-potential young engineers from across the country, which has proven quite effective in meeting our entry-level recruitment needs. In spite of intense competition in the talent market, we continued to attract and retain mid and senior-level persons with requisite skills due to our superior work content and culture, focused professional