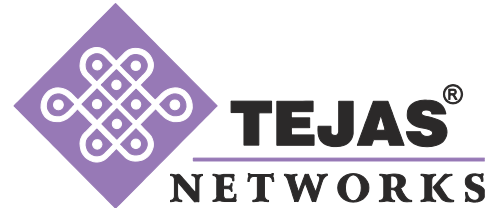


**Tejas Networks Ltd.**

Regd. Office: Plot No. 25, 5th Floor  
J.P. Software Park, Electronic City Phase 1  
Hosur Road, Bengaluru 560 100, India  
Tel : +91- 80- 4179 4600/700/800  
Fax: +91- 80- 2852 0201



**September 21, 2024**

The Secretary  
**National Stock Exchange of India Ltd**  
Exchange Plaza, C/1, Block G,  
Bandra Kurla Complex, Bandra (East)  
Mumbai – 400 051  
**NSE Symbol: TEJASNET**

The Secretary  
**BSE Limited**  
P J Towers,  
Dalal Street,  
Mumbai – 400 001  
**BSE Scrip Code: 540595**

Dear Sir/Madam,

**Re: Disclosure under Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 - Presentation of Analyst / Institutional Investor(s) Meeting**

Further to our letter dated September 19, 2024, which notified of Tejas Networks Limited's participation in the Investor/Analyst Meet organized by ASK Capital Management, please find attached the presentation for the said Investor /Analyst Meet.

Kindly take the above information on record.

Yours sincerely  
**For Tejas Networks Limited**

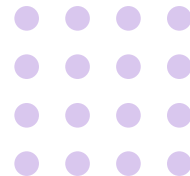
**N R Ravikrishnan**  
**General Counsel, Chief Compliance Officer**  
**& Company Secretary**



# Building a Global Telecom & Networking OEM from India

**Anand Athreya, CEO & MD**

**September 23, 2024**



# Global Networking Market: Key Technology Segments

Carrier  
Networks

Enterprise  
Networks

Wireless  
Technologies



Radio Access  
Network (RAN)



Core



Microwave



WiFi APs



Private 5G



IoT Devices

**\$150B+ Annual Global Spend**

Wireline  
Technologies



Fiber-to-the-X  
(Home./Business)



Optical  
Transmission



SP Switches and  
Routers



Campus Switches &  
Routers



Data Center  
Switches



Cybersecurity

# Explosive Growth in Network Traffic Worldwide

## Advancing Technologies and Expanding Connectivity



4G/5G Mobile  
Broadband

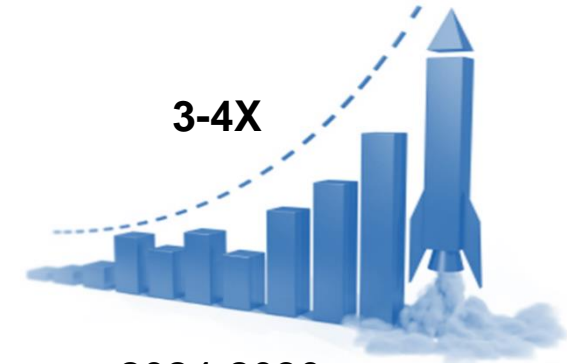


Multi-gigabit Fiber  
Broadband



IoT, Cloud and Edge  
Computing

## Exponential Growth in Network Traffic



2024-2030

## High-bandwidth Applications are Driving Network Usage



Generative AI

Generative AI



VR& Spatial  
Computing



Multiplayer Gaming



Streaming Video



# Driving Fresh Investments in Networking Technologies

Cloud and enterprise digital transformation



AI Data Center Connectivity



4G/5G  
RAN & Core

FTTx & Optical  
Transmission

Switching and  
Routing



Digitalization of cities  
and economies

Long runway of 4G and  
5G deployments  
globally



Massive investments in  
broadband for bridging  
digital divide

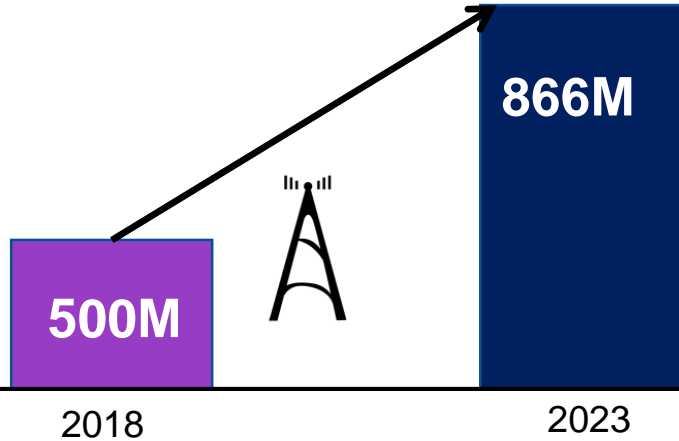


Modernization of utility  
networks demands transition  
from TDM to IP Networks



# India: Solid Launchpad for a Global Telecom OEM

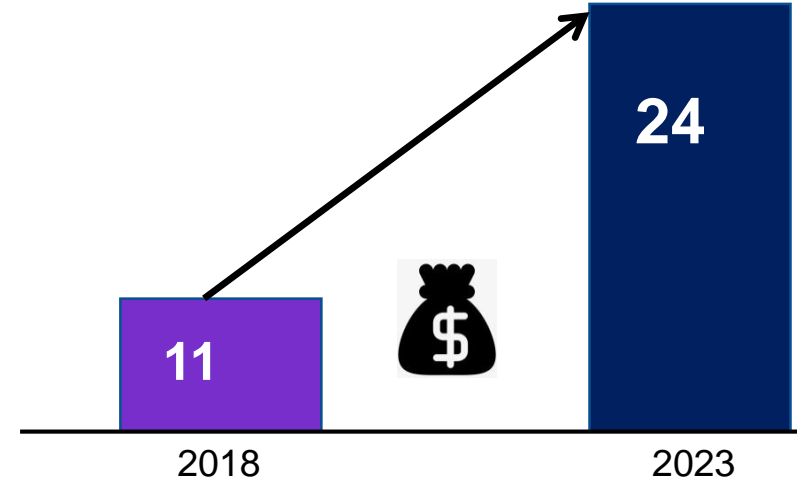
4G+5G Subscribers  
(Million)



**Global #1 in Smartphone  
Data Usage &  
2nd Largest Telecom  
Market by Subscribers**

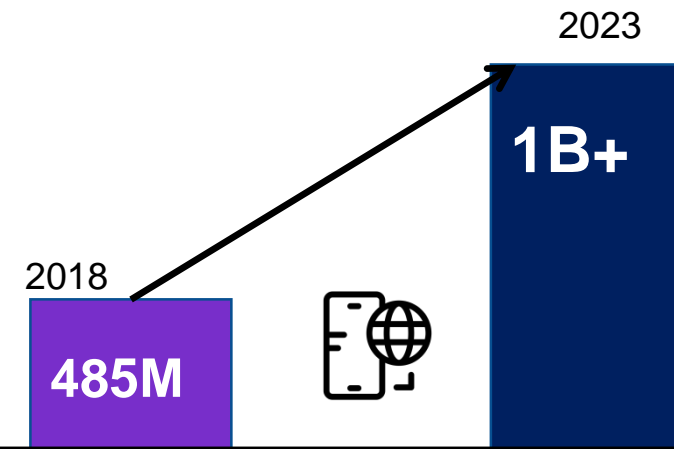
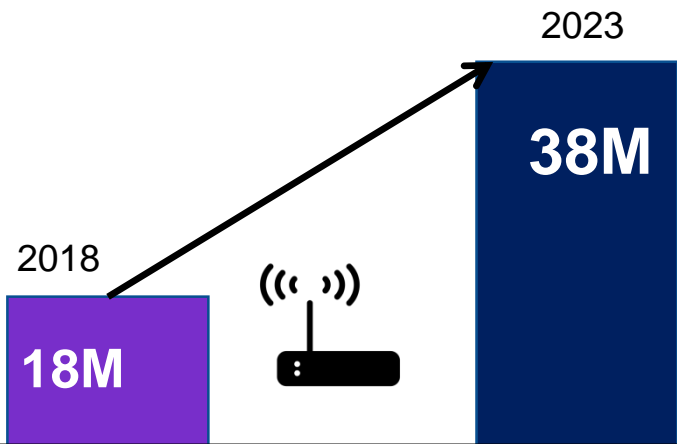
Sources: TRAI, Nokia, Statista

Average Data Usage  
(GB/user/month)



Smartphone Users

Fixed Broadband Subs  
(Million)





# Accelerating Spend on Telecom Equipment

## Utilities

Power, Railways and Oil & Gas companies augmenting capacities on their optical networks



## Mobile Networks

Large public and private investments in 4G densification and 5G coverage expansion



## Indian Railways

Upgrading Collision Avoidance System (Kavach) with wayside towers supporting LTE technology



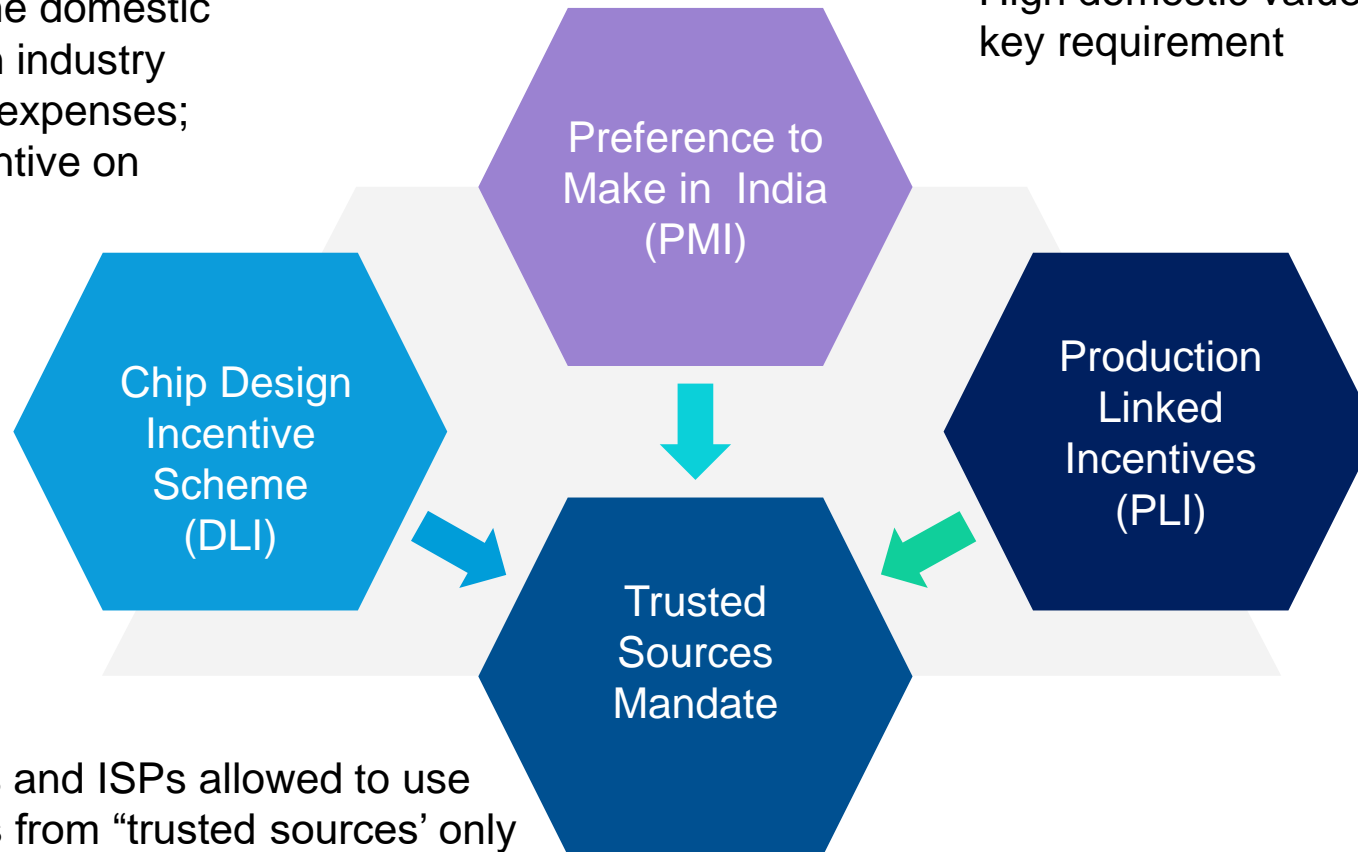
## BharatNet Phase-3

Rs. 1.39 Trillion budgeted for extending broadband to every village in India



# Strong Policy Push for Indigenization

- Offset disabilities in the domestic semiconductor design industry
- 50% subsidy on total expenses; 4-6% production incentive on sales



- Purchase preference in government tenders for telecom products
- High domestic value-addition is a key requirement

- All TSPs and ISPs allowed to use products from “trusted sources’ only
- Applicable on all new telecom equipment purchases from June, ‘21

- 4-6% incentive on incremental sales over Base Year subject to investment thresholds being met
- Additional incentive of 1% under design-linked PLI



# Right Ingredients for Building Product Companies

**Growing Government and Private Sector Spend on Telecom and Networking Products**

**Large Home Market**

**Favorable Regulatory Environment with Strong Government Push for Indigenization**

**Geopolitics**

**Market Access**

**Talent**

**Viewed as a Neutral, Trusted Country; no Security Concerns**

**World-class Software and Chip Design Talent**

# Tejas Networks: A Snapshot



## Vision: To be a Global top-tier Telecom and Networking Equipment Company

- Founded in 2000 and headquartered in Bangalore (India); publicly listed since June, 2017
- India's premier indigenous developer and manufacturer of telecom and networking equipment, both wireless and wireline
- Backed by Tata Group, India's leading multinational conglomerate



### Products

End-to-End Wireless & Wireline Products

**Wireless:** 4G/5G RAN (Baseband and Radios)

**Wireline:** FTTx, Optical Transport and Switching



### Applications

Mobile RAN and Backhaul

Wholesale & Enterprise Bandwidth Services

Home and Business Broadband

Critical Infrastructure Networks



### Business Success

Deployed in 500+ Networks across 75+ Countries

Incumbent in all large public and private telcos in India

Global recognition for innovation and business excellence



### People

1980 Employees with >60% in R&D; 445+ patents filed

Multi-disciplinary skillsets in hardware & software

Leading R&D spender (as a % of sales) among public cos

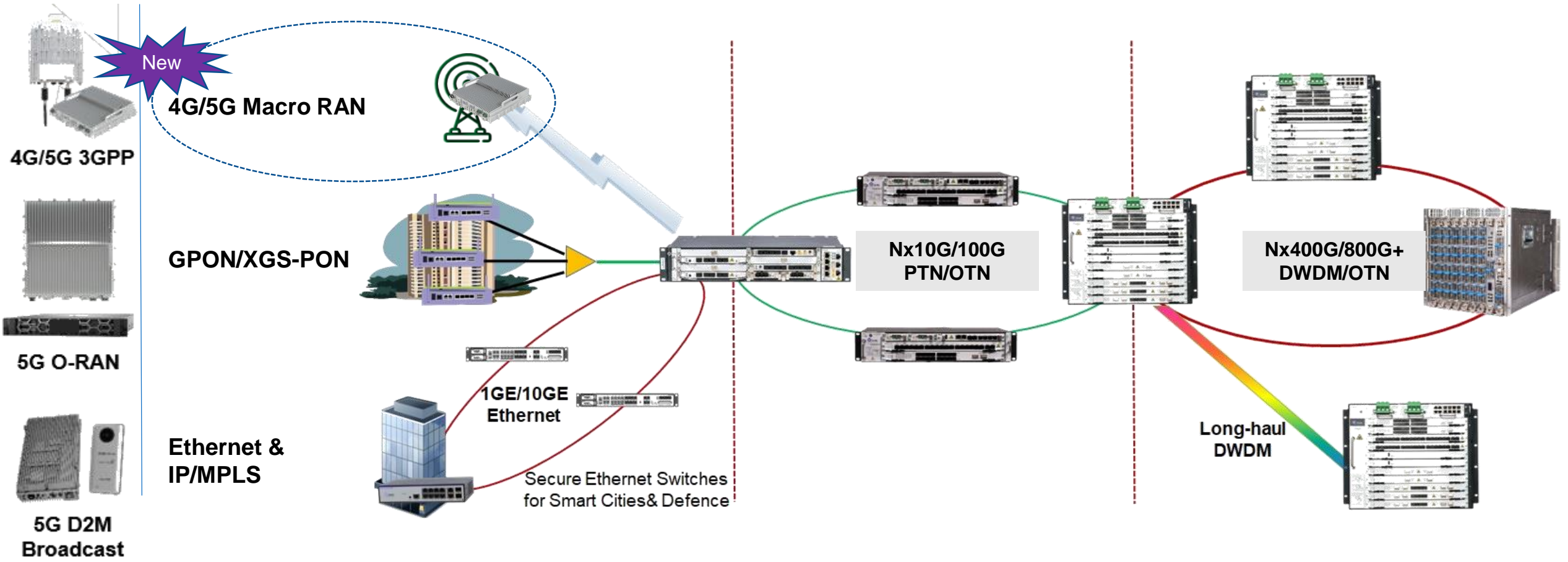
# Delivering End-to-End Telecom Networks

## Universal, SDN-ready Network Management System (NMS)

**Broadband Access  
(LTE/LTE-A, xPON, Ethernet)**

**Metro Aggregation & Routing  
(PTN, OTN, IP/MPLS)**

**Metro Core & Long-haul  
(DWDM & OTN)**





# Typical Applications Served

## 4G/5G Mobile RAN & Backhaul

High-performance radios, baseband units & optical xHaul solutions for 4G & 5G Networks

**Products:** 4G/5G Radios and Base station, Ethernet, IP/MPLS, GPON, OTN



## Wholesale & Enterprise Data Services

Cost-efficient solutions to upgrade bandwidth in Metro and Core networks

**Products:** DWDM, OTN, Carrier Ethernet and IP/MPLS

## Critical Infrastructure

Seamless network transformation from legacy circuit to packet transport technologies in power, rail, oil & gas, defense sectors

**Products:** MPLS-TP, IP/MPLS, Carrier Ethernet, DWDM



## Home & Business Broadband

Deliver high-speed broadband connectivity on optical fiber, fixed wireless and copper cables to homes in cities and rural areas

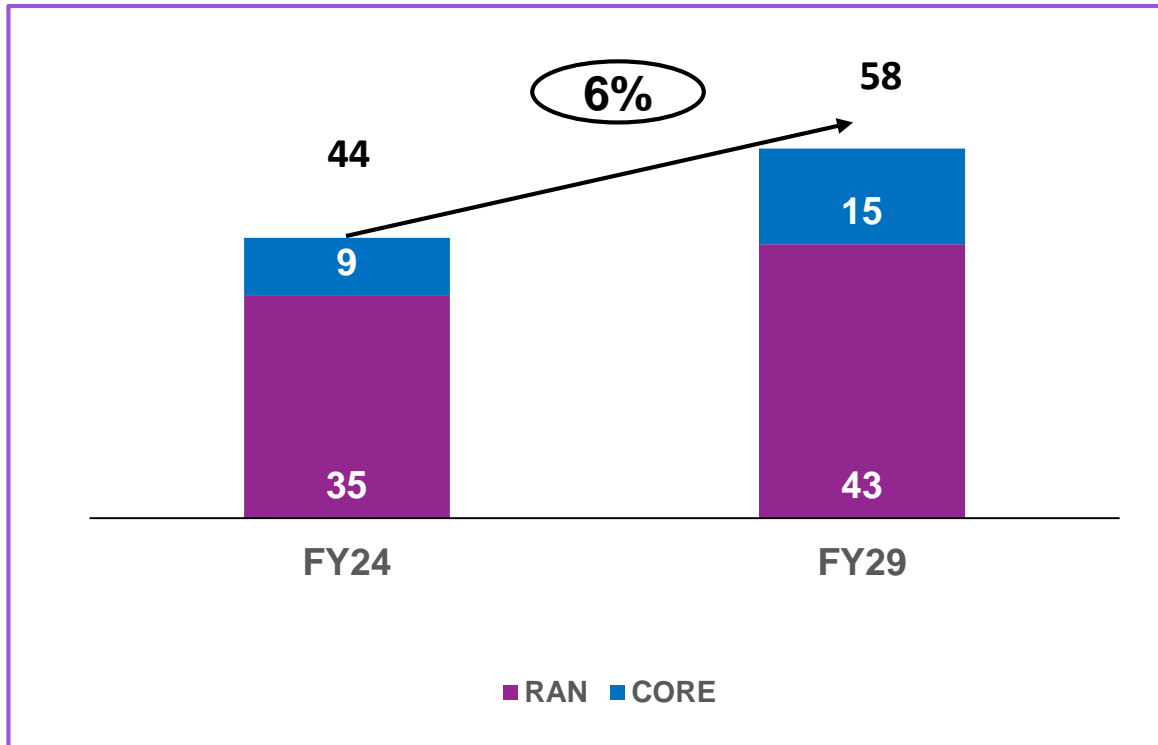
**Products:** GPON/XGS-PON, PTN, LTE, Ethernet Switches

# Large Addressable Market

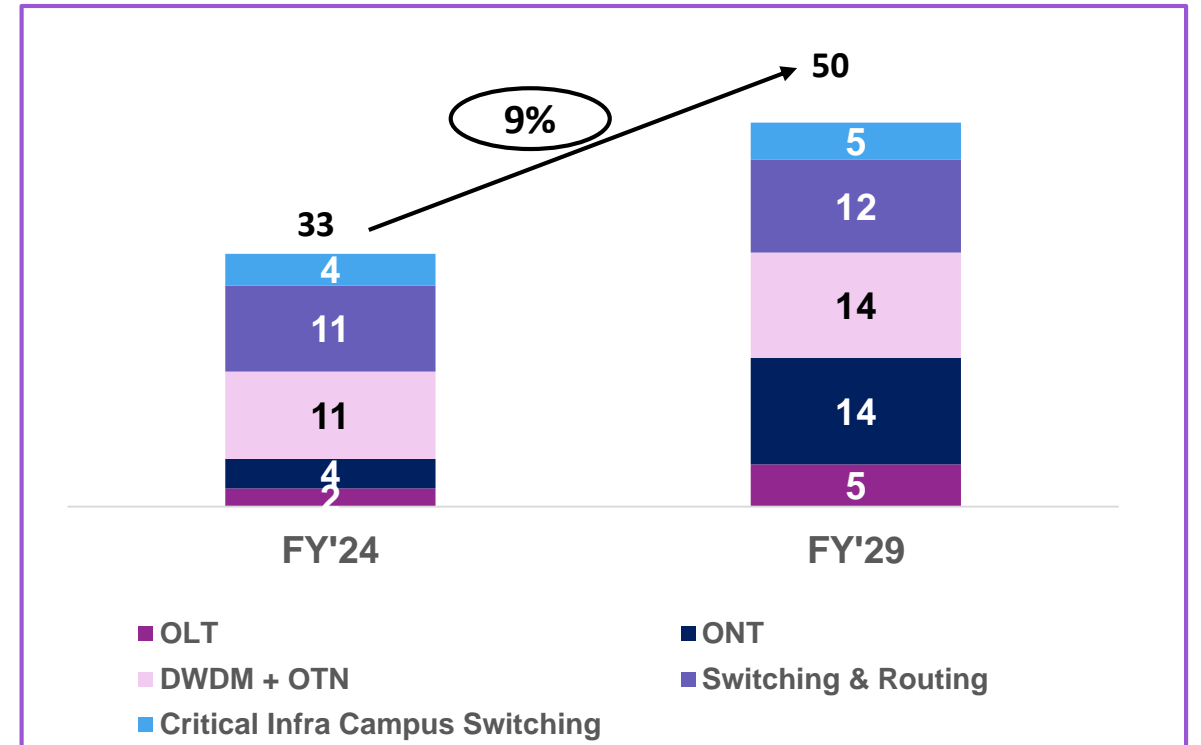
- Large TAM in both wireless and wireline markets
- Emergence of open and disaggregated technologies
- Strong push for Make In India
- Favourable geo-political situation

Opportunity to build a top-tier global OEM from India

### Addressable Wireless Market (USD bn)



### Addressable Wireline Market (USD bn)



Source: Omdia, IDC, Internal Estimates  
 TAM: Total Addressable Market (excluding China)

# Experience in Building Countrywide Telecom Networks

## Rural Broadband



- Largest supplier of GPON equipment for BharatNet, India's national rural broadband network
- Deployed in 100,000+ villages and 3000+ blocks; 4000+ rural/sub-urban stations

## Smart/Safe Cities and Defence



- Ethernet switches for over 15 Smart and Safe City projects in India
- Key domestic supplier of networking equipment to tri-services

## Pan-India Telecom Networks



- India's largest domestic supplier of optical (PTN, OTN/DWDM, MSPP) & home broadband (GPON) products
- Deployed in all major public and private sector telco and ISP networks

## Space and Broadcasting



- Pan-India Sat-IoT installations in fishing vessels
- Innovative D2M (Direct-to-Mobile) Broadcast solution trials

## Critical Infrastructure



- Built high-capacity optical networks for railways, metro rail, power, oil & gas companies
- Pan-India DWDM and PTN networks for PowerTel, RailTel, GAIL

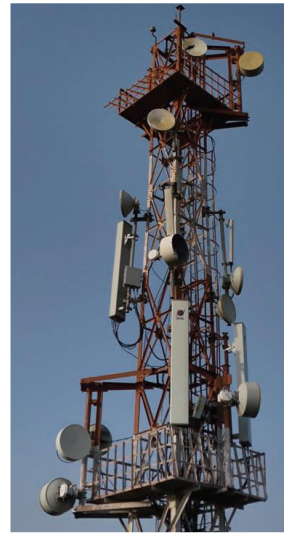
## International



- 100G/200G/400G wavelength services on 10,000+ kms of fiber across Africa
- Country-wide optical network in Italy
- State-wide optical and fixed wireless network in Malaysia



## Large Customer Wins in FY24



### Indigenous 4G/5G Stack for BSNL's Pan-India Rollout

- One of the largest mobile network rollouts in the world covering 100,000+ sites
- Sole supplier of 4G/5G baseband and radio products
- Shipped equipment for 27,000+ cell sites as on 30<sup>th</sup> June, 2024

### Indigenous Rollout of IP/MPLS Routers for BSNL MAAN Network

- One of the largest indigenous IP/MPLS router deployments in India
- Deployed 13,000+ TJ1400 series access and aggregation routers
- Unified backhaul for diverse data services including mobile, fiber broadband, Wi-Fi and IoT

### Enhancing Maritime Safety with two-Way MSS Network

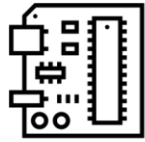
- Secured provisional PO from NSIL for indigenous Satcom Xponders on marine fishing vessels nationwide
- Powered by SDR chips; supplied for 2500+ vessels in FY24
- Real-time tracking, 2-way messaging, SOS alerts and weather updates ensure safety and productivity for fishermen.

# Building a World-class Team with a Strong R&D

Complex, multi-disciplinary skills are required to make global, high-reliability, state-of-the art telecom products



Semiconductor IP



High-speed PCB Design



Embedded Software



Mechanical Design



Thermal Simulations



Network Protocols



Reliability Engineering



Regulatory Testing



Verification & Validation



Design for Manufacturing



>60%

Workforce in R&D

6.6%

Attrition

8+ yrs

Average Experience of Senior R&D Team

14.6%

Gender Diversity

18+ yrs

Average Experience of Senior Sales Team

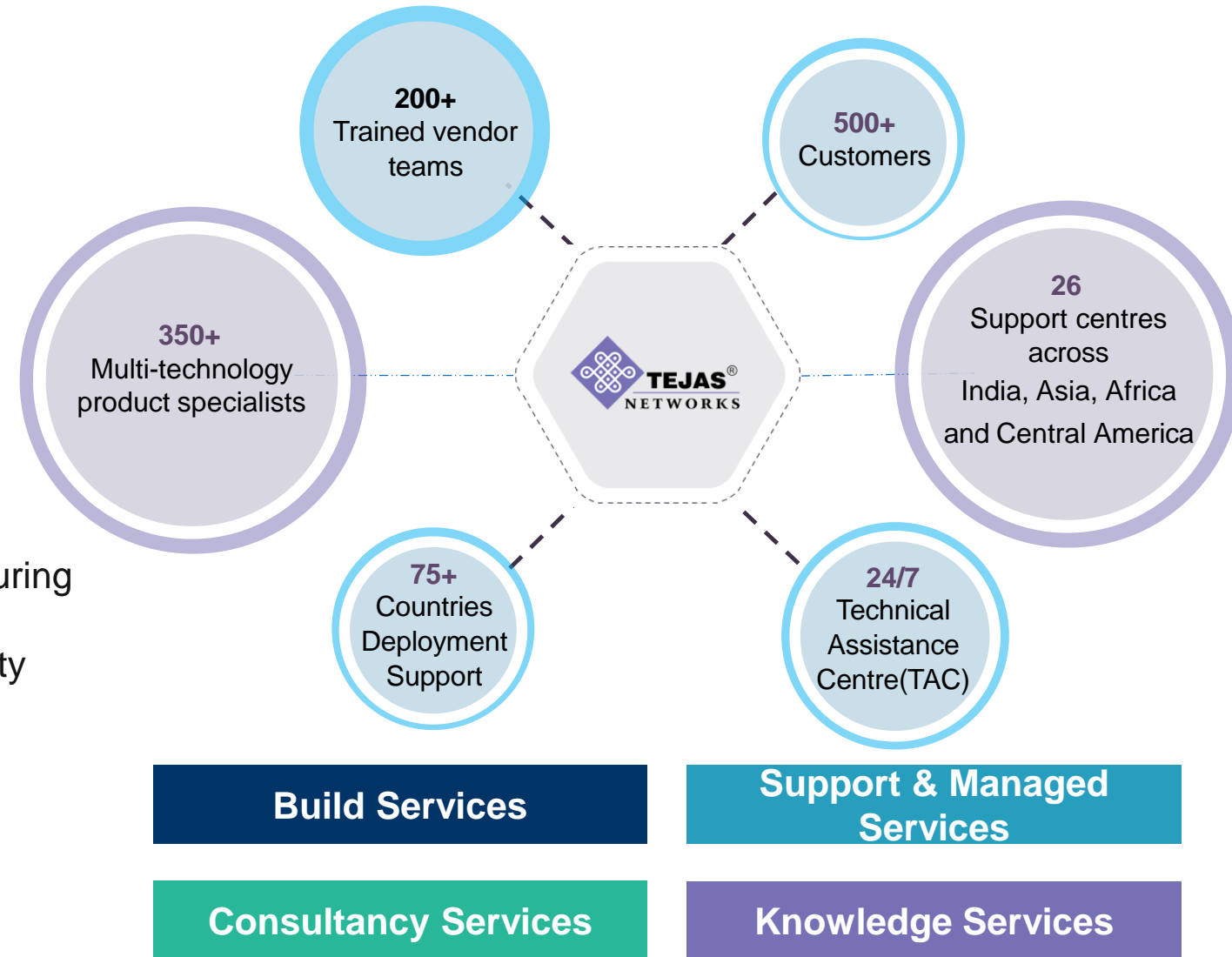
25%

Post-graduates in R&D

# Global Scale Manufacturing and Network Services

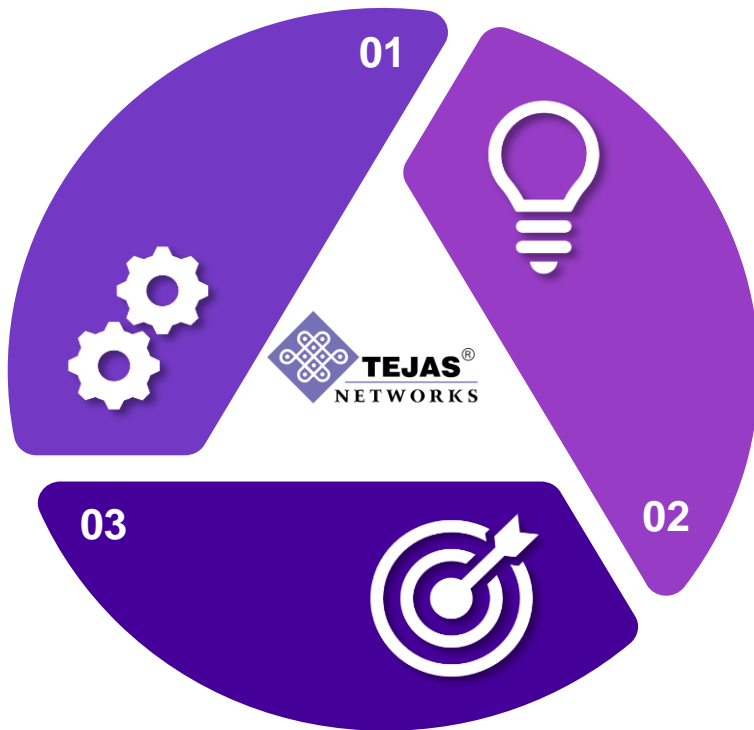


- Asset-light business model with multiple Electronics Manufacturing Services (EMS) partners for manufacturing
- In-house facilities for final assembly, testing and quality control
  - 72,000 sq. ft. Integration & Testing facility with advanced technology and skilled staff.
  - Approved under Design-linked PLI scheme
- Meeting global standards such as TL9000, ISO, ANSI (USA) and IEC (Europe)





# Our Competitive Edge and Structural Enablers



## 1. End-to-End Portfolio

- Spanning wireless, optical and packet technologies
- Versatile range of high-power 4G and 5G macro radios

## 3. Business Model

- Cost-efficient R&D with world-class productivity
- Scalable, asset-light manufacturing in collaboration with global EMS partners

## 2. Innovative Solutions

- Ultra-converged broadband, transport and routing solution
- Differentiated network solutions for diverse applications

### Key Structural Enablers Benefiting Tejas

Disaggregation of Telecom Networks

Adoption of Open Networking Technologies

Demand for Trusted Equipment Suppliers

# Contribution to Global Standards

## ITU

- 6G Vision and Standardization
- Network protection

## TSDSI

- Driving standards for India
- xHaul, 5Gi, Reconfigurable Intelligent Surfaces

## 3GPP

- AI-ML, Massive MIMO
- Sub-band Full Duplexing
- Network Energy Savings



## Bharat 6G

- Research on multiple 6G projects - AOC, OAM, THz research

## ORAN

- Open RAN
- Cloudification & Orchestration

## IEEE

- Industry Academia Research
- IEEE Communication Society (Comsoc) Chair (Bangalore)

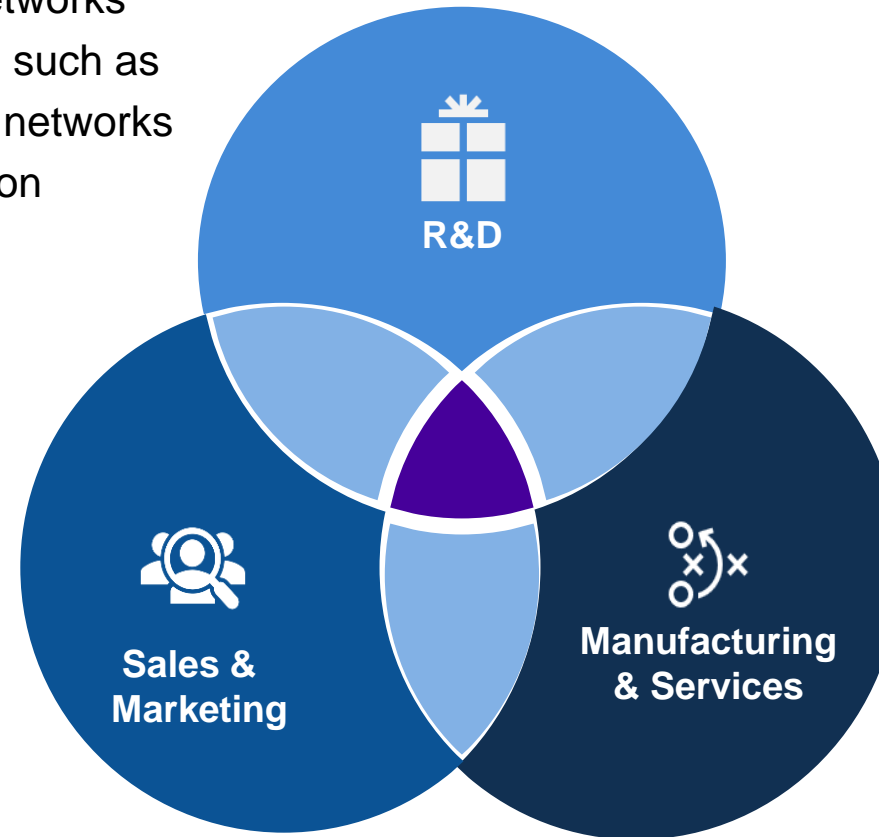
# Our Strategy

## Rich Product Portfolio

- Create a world-class Wireline + Wireless portfolio for global carrier networks
- Expand to adjacent markets such as enterprises and data center networks
- Solutions based differentiation

## Go to Market Strategy

- Achieve a leadership position in India both in government and private
- Leverage Tata brand, global telco relationships to break into global Tier-1s
- Use large reference wins in India to tap similar opportunities globally

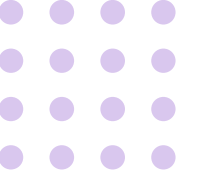


## Global Scale Operations

- Capitalize on India's PLI scheme to strengthen manufacturing infrastructure
- Expand EMS partnerships to build scale
- Develop robust technical pre- and post-sales support

**Continuing to invest in R&D, Supply Chain, International Sales and Marketing and Facility Expansion**





# Thank You!

---

Email: [ir@tejasnetworks.com](mailto:ir@tejasnetworks.com)  
Phone: +91(80)41794600