

May 09, 2024

To,

The Manager  
Listing Department  
National Stock Exchange of India Limited  
Exchange Plaza, Bandra Kurla Complex,  
Bandra (East), Mumbai– 400051

**Company Trading Symbol: FROG**

**RE: Disclosure under Regulation 30 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 (“SEBI Listing Regulations”).**

**Subject: Investor Presentation – May 2024**

Dear Sir(s)/ Madam,

With reference to the subject above, please find attached herewith Investor Presentation – May 2024.

The same will also be available on the website of the company at [www.frogcellsat.com](http://www.frogcellsat.com)

This is for your information and records.

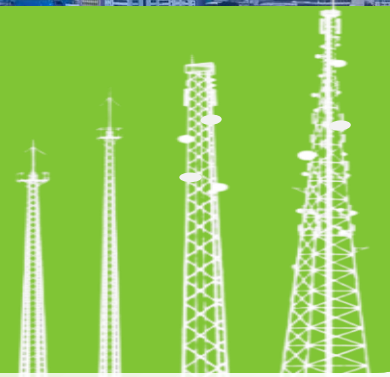
Thanking You  
Yours Faithfully,  
For Frog Cellsat Limited

Manisha Makhija  
Company Secretary

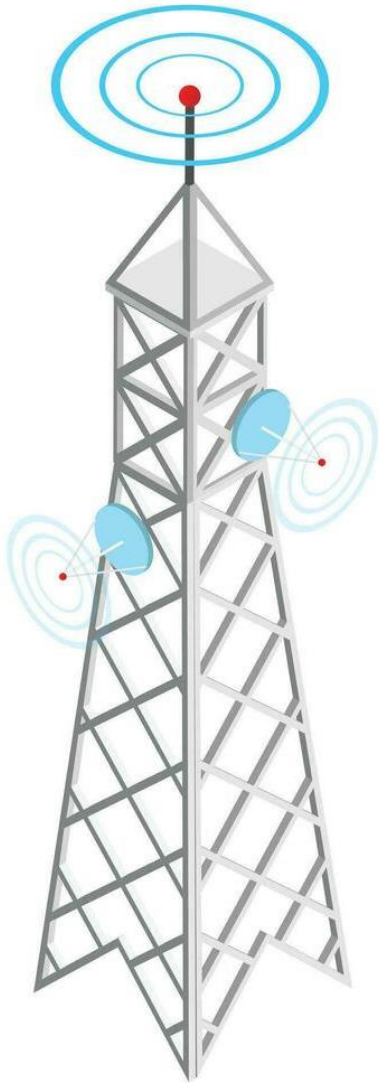
A 3D rendering of a communication tower with multiple white satellite dishes, set against a city skyline at sunset. The tower is the central focus, with a dense urban landscape and a sky with soft orange and blue hues in the background.

# FROG CELLSAT LIMITED

INVESTOR PRESENTATION MAY 2024



# SAFE HARBOR



*Certain statements in this document may be forward-looking statements. Such forward-looking statements are subject to certain risks and uncertainties like government actions, local, political, or economic developments, technological risks, and many other factors that could cause our actual results to differ materially from those contemplated by the relevant forward-looking statements. Frog Cellsat Limited (“FCL” or the “Company”) will not be in any way responsible for any action taken based on such statements and undertakes no obligation to publicly update these forward-looking statements to reflect subsequent events or circumstances.*



# ATMANIRBHAR BHARAT

*Empowering 'Make in India' Initiative Through Developing Import Substitute & Technologically Advanced Products*



# FCL AT A GLANCE



Over two decades of mastery in delivering cutting-edge wireless coverage enhancement solutions.



Renowned as prominent manufacturers of telecom equipment.



Boasts a state-of-the-art production and R&D hub located in Noida.



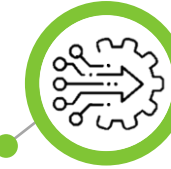
Trusted by industry giants like Airtel, Jio, Vodafone Idea, Adani, Motorola, and more.



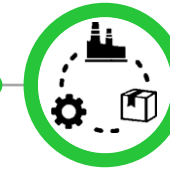
Produces ISO-certified products rivaling the quality of larger corporations.



Positioned as a price-competitive, field-proven, future-ready, and dependable force in the industry.



Trailblazers in pioneering Interference Mitigation Technology.



Proficiency spans the entire value chain, from Designing to Manufacturing and Installation of Active DAS, RF Repeaters, and Customized RF solutions.



Committed to continuous R&D efforts to meet the evolving needs of the telecom sector.



# BUILDING UPON A SUCCESSFUL LEGACY



**Mr. Konark Trivedi**  
*Co-Founder and MD*

- Over 25 years of dynamic experience in the telecommunications industry
- Brings expertise from previous roles at renowned companies such as HCL and others
- Holds impressive academic qualifications with PG and B.Tech in mobile and satellite communication.



**Mrs. Sonal Trivedi**  
*Co-Founder & CPO*

- Extensive experience spanning over 20 years in HR, Training, Administration, and Culture Building
- Instrumental in shaping a vibrant culture and implementing robust HR policies at Frog, leading to prestigious recognitions such as "Great Place to Work," GPW – Women, and Best in Telecom awards
- Holds a gold medal in Master of Industrial Psychology from HNBGU and is a CELTA certified teacher (Certificate of English Language Teaching to Adults) from the British Council, New Delhi (affiliated with Cambridge University)



**Mr. Charan Jeet Kalra**  
*CFO*

- Holds over 10+ years of experience in implementing strategic financial decisions and overseeing finance operations.
- Currently responsible for managing end-to-end operations, including Banking, Liquidity Management, Budgeting, Forecasting, Project funding, Auditing & Accounting, and MIS & PL controls, among others, for Frog CellSat.

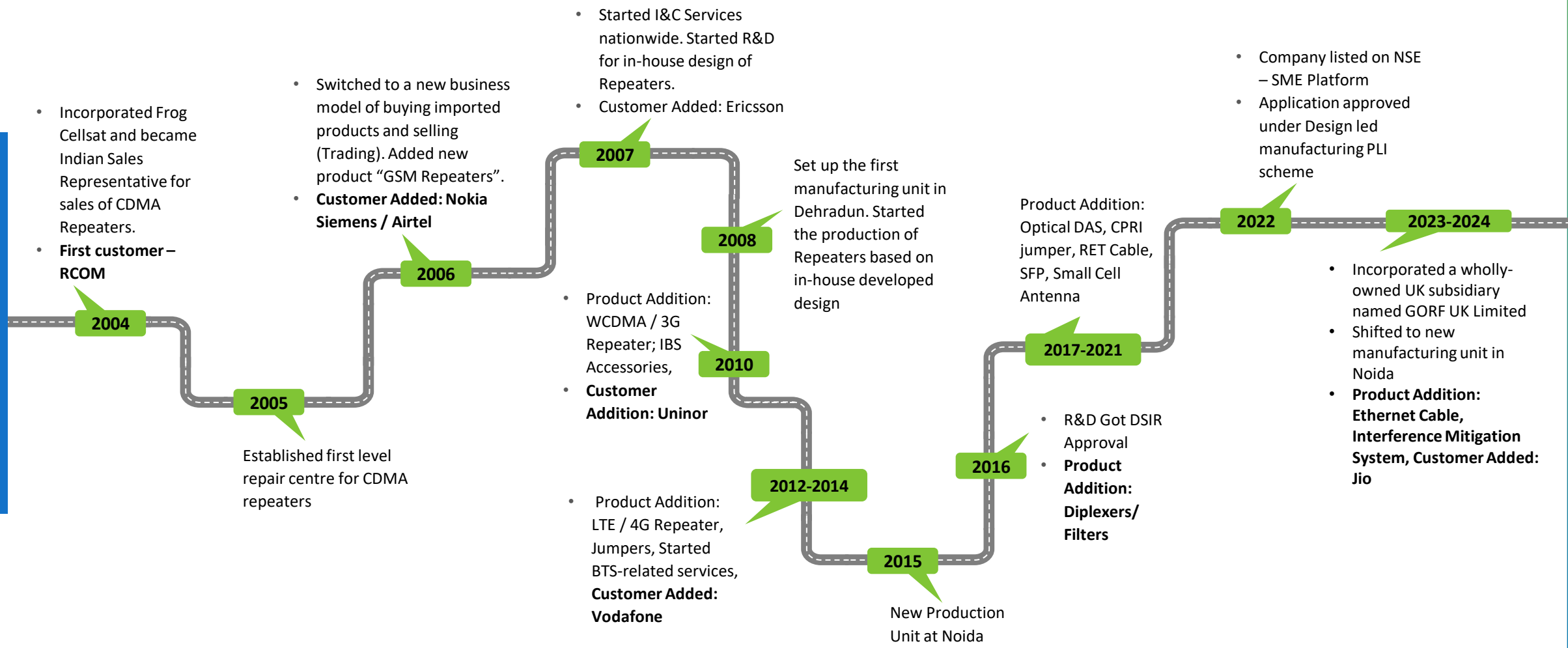


**Mr. Tarun Tularam Sharma**  
*CTO*







- Drives FCL's long-term technology vision and oversees R&D initiatives focused on coverage enhancement solutions for next-generation networks, emphasizing technology standards, innovation, customization, and industry collaboration.
- Prior to joining FCL in 2009, served as a specialist on CDMA and WiMAX technology at Nortel India's Knowledge Services division and led Marketing & Systems SBU at India Satcom
- Headed the Voice Communications Group at Reliance



# OUR JOURNEY



# PRODUCT OVERVIEW

Product	Product Description	Application	Product Image
Interference Mitigation System "OPTiX"	OPTiX is a solution based on Patented technology and helps reduce interference reaching to BTS Sites on their Uplink path from various sources.	OPTiX helps Mobile Operator to increase their BTS coverage by cleaning interference and enabling BTS Site to read even weaker signal coming from farther location improving significantly KPIs such as RSSI, Call success rate, VoLTE Traffic, data traffic, etc.	
Network Accessories -Includes Jumpers, CPRI, RET Cable, Multiplexers, Filters, SFP, Feeder Cable	Network accessories are used to combine, split, switch, boost, or direct packets of information along telecommunications network.	Products for integrating mobile cell site.	
Digital Repeaters	Enhances cellular coverage in dark zones for a single operator	<ul style="list-style-type: none"> <li>Improving mobile signal indoors for small to mid-size area like offices, residencies, etc</li> <li>Providing mobile coverage in remote areas</li> </ul>	
Optical DAS	Optical Distributed Antenna System supports multi-technologies and multi-operators for cellular coverage to medium and large facilities	<ul style="list-style-type: none"> <li>Improving mobile coverage in large size venues like stadiums, airports, etc.</li> <li>Covers all cellular bands and public safety bands</li> </ul>	
Antenna	Antennas radiate RF power and illuminate the dark zones	<ul style="list-style-type: none"> <li>Provides BTS coverage</li> <li>Provides small cell coverage</li> </ul>	
IBS Accessories	Provides indoor coverage using a series of hubs/Equipment's distributing the signal to number of antennas	<ul style="list-style-type: none"> <li>Products for integrating solution for inbuilding mobile coverage</li> <li>Includes Yagi/panel/omni antenna, RF splitters/combiners, dummy load</li> </ul>	





# SPECTRUM OF SERVICES PROVIDED TO TELECOM COMPANIES



## In-Building

### Installation and Roll-out Services: includes RF Survey

Active /Passive DAS Design through IBwave / Manual, Deployment & Integration Passive DAS, Active DAS, Small Cell, Lamp site, Radio DOT, Femto Cell. Acceptance Testing and Optimization. NMS setup and configuration Femto Deployment & Project Management.

### Network Maintenance Services includes:

Operation and Maintenance, Modification and expansion Planning and Deployment Troubleshooting & Rectification.

## BTS, MW & Small Cell I&C

### Installation and Roll-out Services include:

RFI Survey, BTS Installation and Integration, BTS De-installation (End to End Scope) MW Installation and Commissioning, E1 Testing, Link NMS Visibility. Acceptance Installation & Commissioning. RET installation, Indoor, Outdoor Small Cell & ULS I&C.

### Network Maintenance Services includes:

Link Alignment BTS Indoor to Outdoor Installations, BTS Swaps Microwave Upgrades 4th Sector Addition Traffic Shifting & Optimization ODU Upgradation, Site Relocation, GSM Antenna / RRU Height adjustment.

## RF Planning & Optimization

### Installation and Roll-out Services: includes RF Survey

LOS (MW) Survey, RF & TX Planning, Optimization (RF KPIs), Drive Test / SCFT, Network Benchmarking and Acceptance Testing, EMF Measurement and Reporting































### Network Maintenance Services:

Network Complaint Rectification



# BROAD CUSTOMER BASE ACROSS INDUSTRIES



Domestic Mobile Operators	SI & Telecom Equipment Providers	In-Building Coverage Infra Providers	Large Project Developers	Government & Defence	International Mobile Operators & SI
  	    	  	      	  	        



# OPPORTUNITIES FOR GROWTH

Each product has a  
**50+Cr**  
Opportunity/year

Infra Projects (Airports and Metro)

VI 4G Site Accessories

5G FWA Terminal

I&C Services Expansion

Each product has a  
**100+Cr**  
Opportunity/year

Jio 5G Site Accessories

Tejas / BSNL 4G Site Accessories

Enterprise Products : UBR, ONT, etc.

Interference Mitigation System

Each product has a  
**200+Cr**  
Opportunity/year

Manufacturing Services

Defence Offset Projects



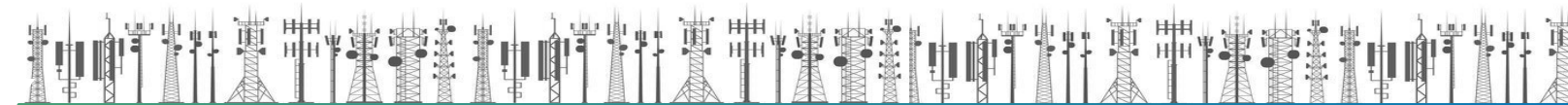
# R&D INVESTMENTS

## Yearly Investment, Incremental Revenue and Incentive Receivable under the PLI scheme:

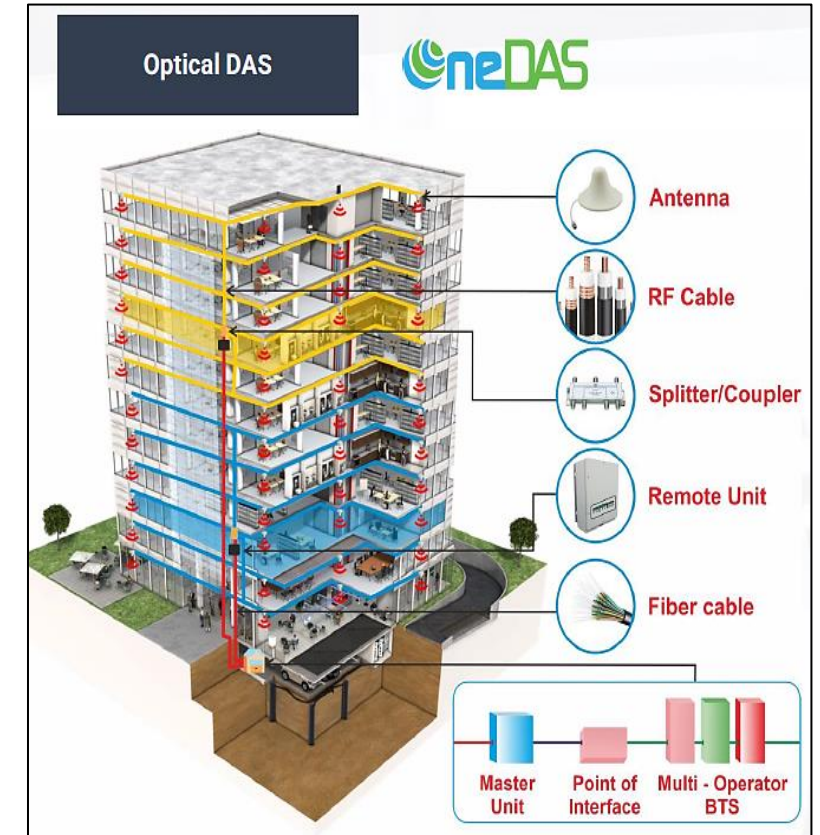
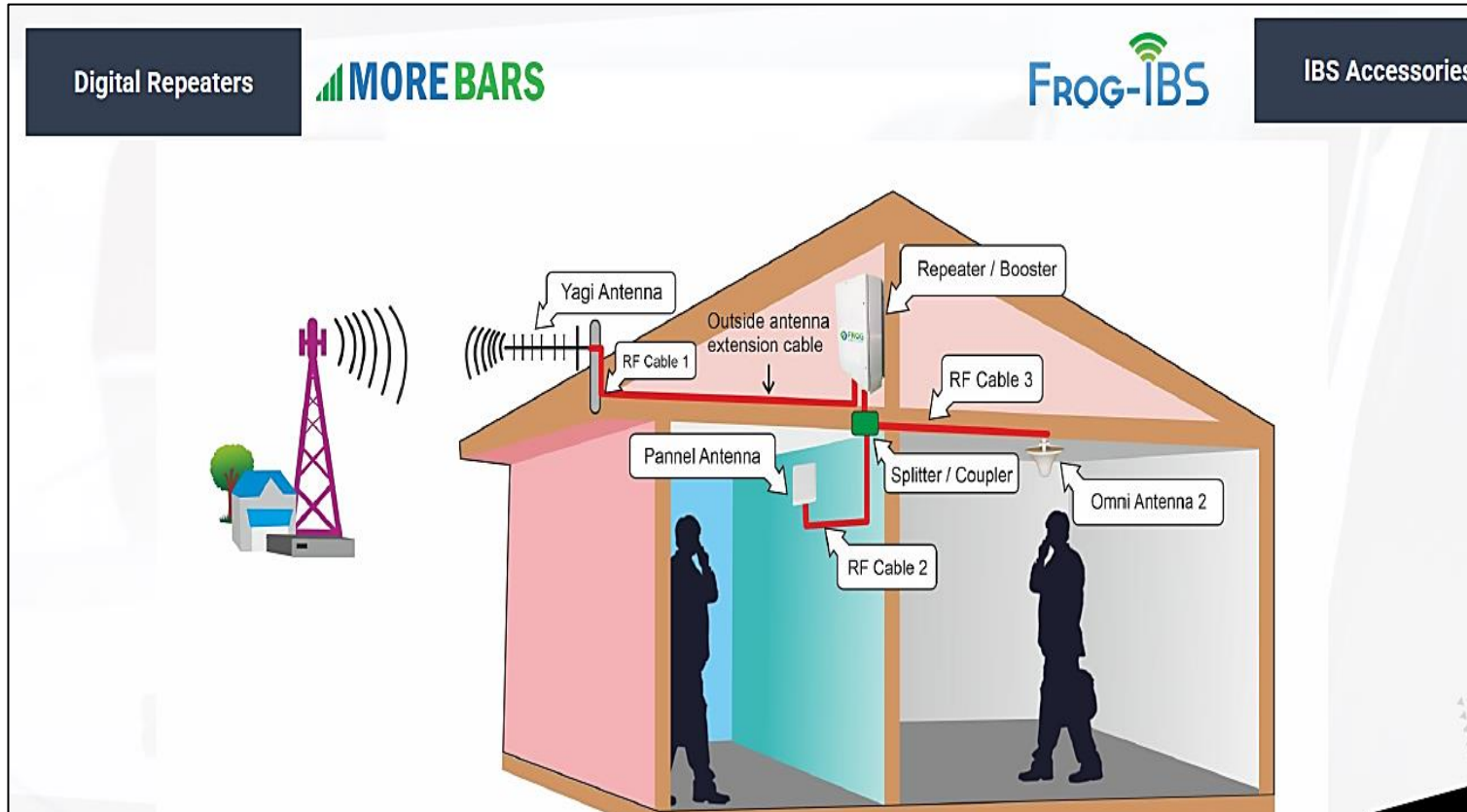
FY (₹ in Crores)	Minimum Incremental Investment over the Baseline (i.e. after 31- Mar-2022) (Cumulative)	Minimum Eligible Incremental Net Sales of Manufactured Products over the Base Year (A)	Maximum Eligible Incremental Net Sales of Manufactured Products over the Base Year (B)	Sales Forecast as submitted by the applicant (C)	Eligible Net Sales for Incentive (Lower of B & C) (D)	Eligible Net Sales i.r.o. Products complying with Design-led Criteria (out of D)	Maximum Incentive Payable
FY23	3.20	9.60	64.00	65.00	64.00	64.00	5.12 (8%)
FY24	6.40	19.20	128.00	130.00	128.00	128.00	10.24 (8%)
FY25	11.20	33.60	224.00	225.00	224.00	224.00	15.68 (7%)
FY26	16.00	48.00	320.00	325.00	320.00	320.00	19.20 (6%)
FY27	-	48.00	320.00	350.00	320.00	320.00	16.00 (5%)
<b>Total</b>	<b>16.00</b>	<b>158.40</b>	<b>1,056.00</b>	<b>1,095.00</b>	<b>1,056.00</b>	<b>1,056.00</b>	<b>66.24</b>

## Product under PLI scheme:

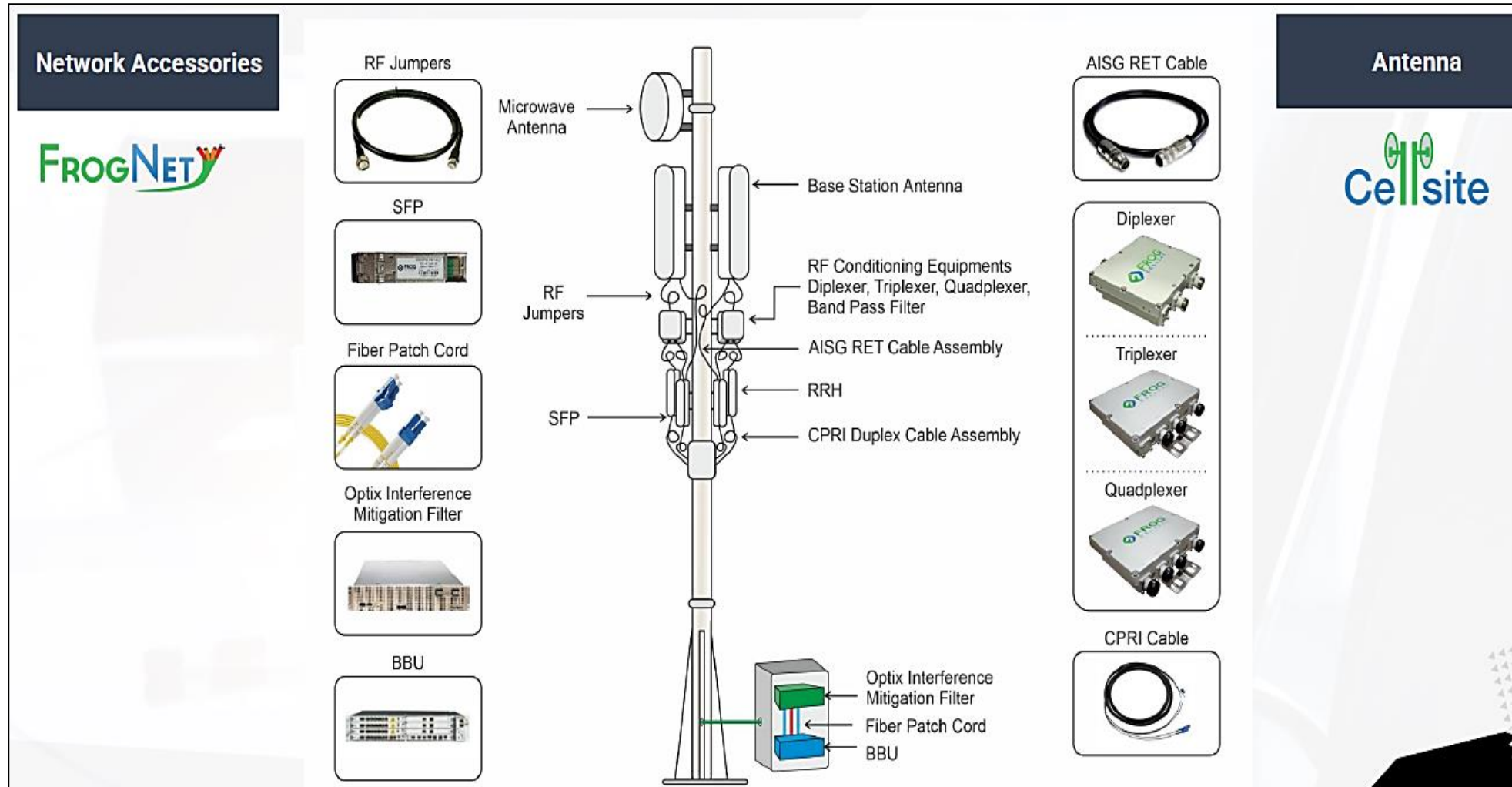
Index No.	Name of Product	Production Status
P01	Cavity Multiplexer / Filter / Coupler and Splitter / Combiner / Termination	Production Started
P02	Digital Repeater	Production Started
P03	IBS Antennas	Production Started
P04	Optical DAS	Production Started
P05	Microwave Antenna and Base Station Antennas	Production Started
P06	Interference Mitigation System (IMS)	Production Started
P07	4G/5G CPE	Ready for production
P08	GPON ONT/ONU	Ready for production
P09	Digital DAS	Yet to Start
P10	Jammer	Yet to Start
P11	4G/5G Small Cells	Yet to Start
P12	GPON OLT	Yet to Start
P13	Unlicensed Band Radio	Yet to Start
P14	Open RAN Radio Unit	Yet to Start
P15	IOT / M2M Devices including End-point Devices, EDGE Devices, Routers & Gateway and NMS System	Yet to Start
P16	Microwave Radio	Yet to Start



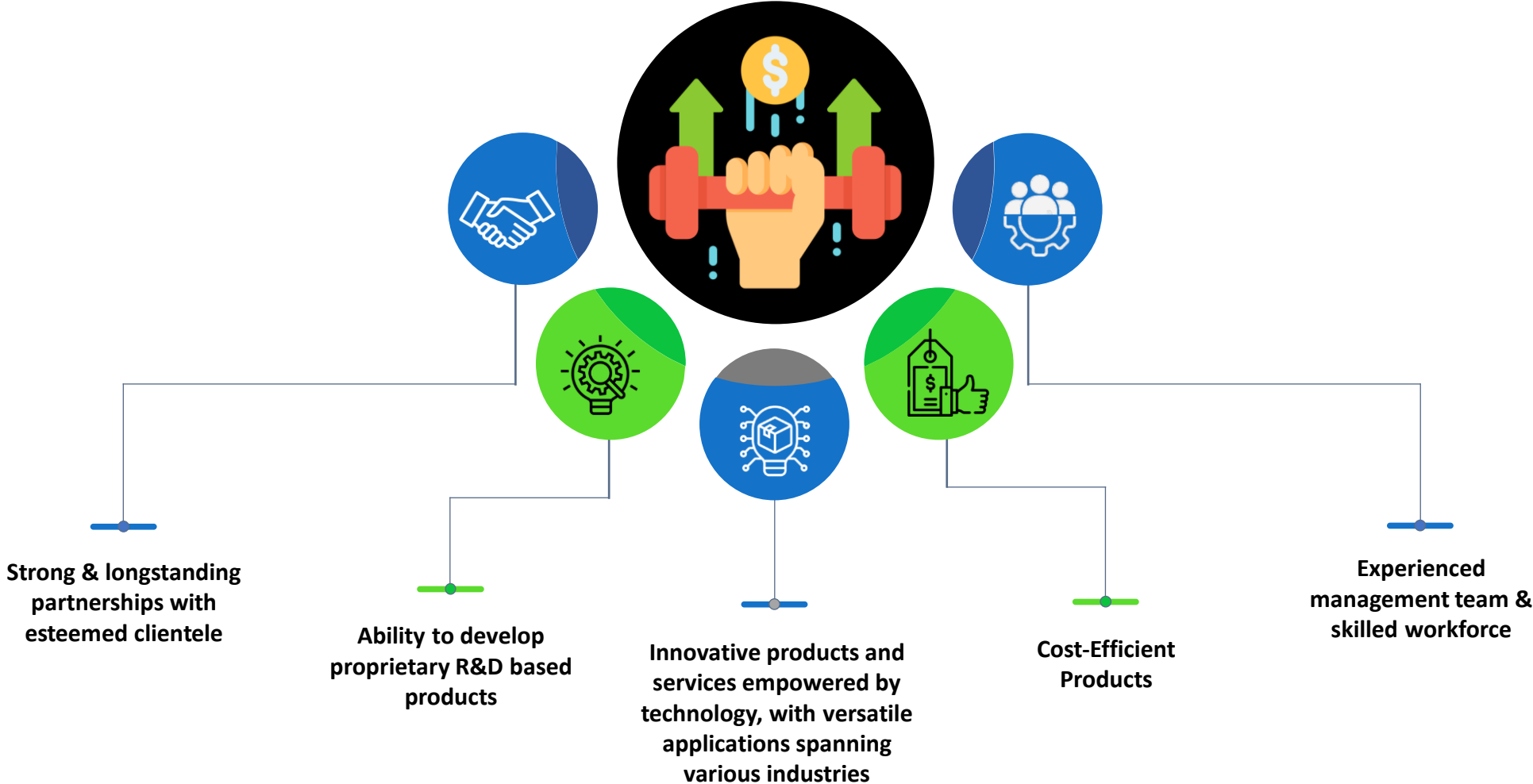
# TRANSFORMATION FROM REPEATER SUPPLIER TO AN END TO END TELECOM SOLUTION PROVIDER



# CONTINUED...



# KEY BUSINESS STRENGTHS



# FY24 BUSINESS UPDATE AND UPCOMING BUSINESS OUTLOOK



## What we plan to do in FY25



## What we did in FY24



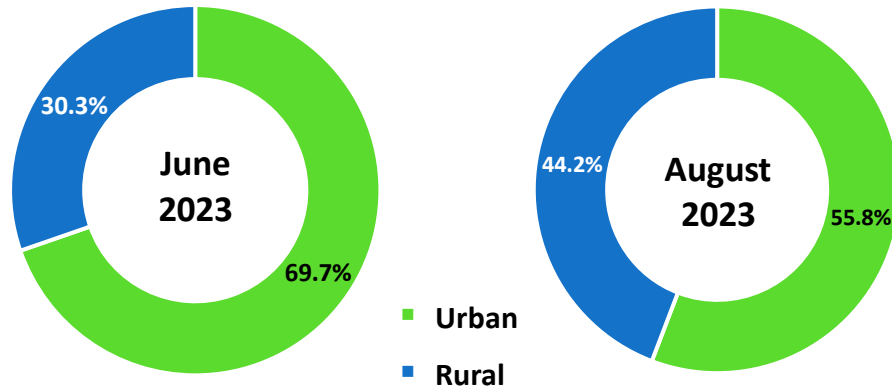


# INDUSTRY OVERVIEW

## Large Opportunities in Domestic Markets

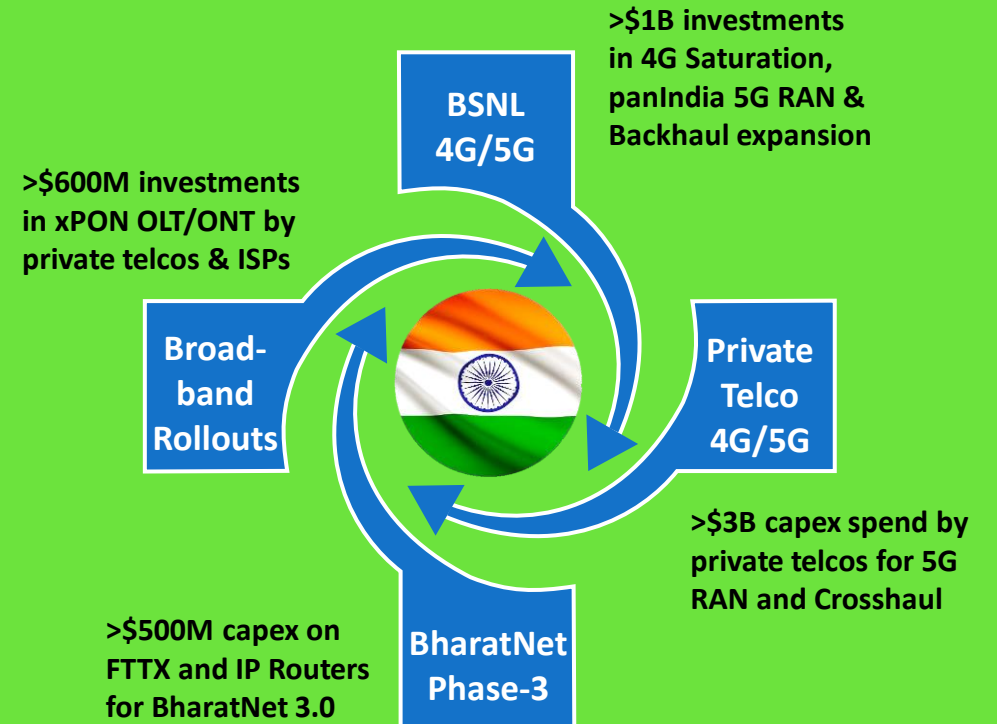
- ❖ India is currently the second-largest telecommunication market and has the second-highest number of internet users in the world.
- ❖ The PLI scheme in telecom and networking products aims to make India a global hub of manufacturing telecom equipment.
  - It is estimated that full utilization of the scheme funds is likely to lead to incremental production of about ~ ₹2.6 lakh crore (\$ 32.01 Bn) with exports of ~ ₹2.2 lakh crore (\$ 26.67Bn) over five years

### Urban and Rural tele-density:

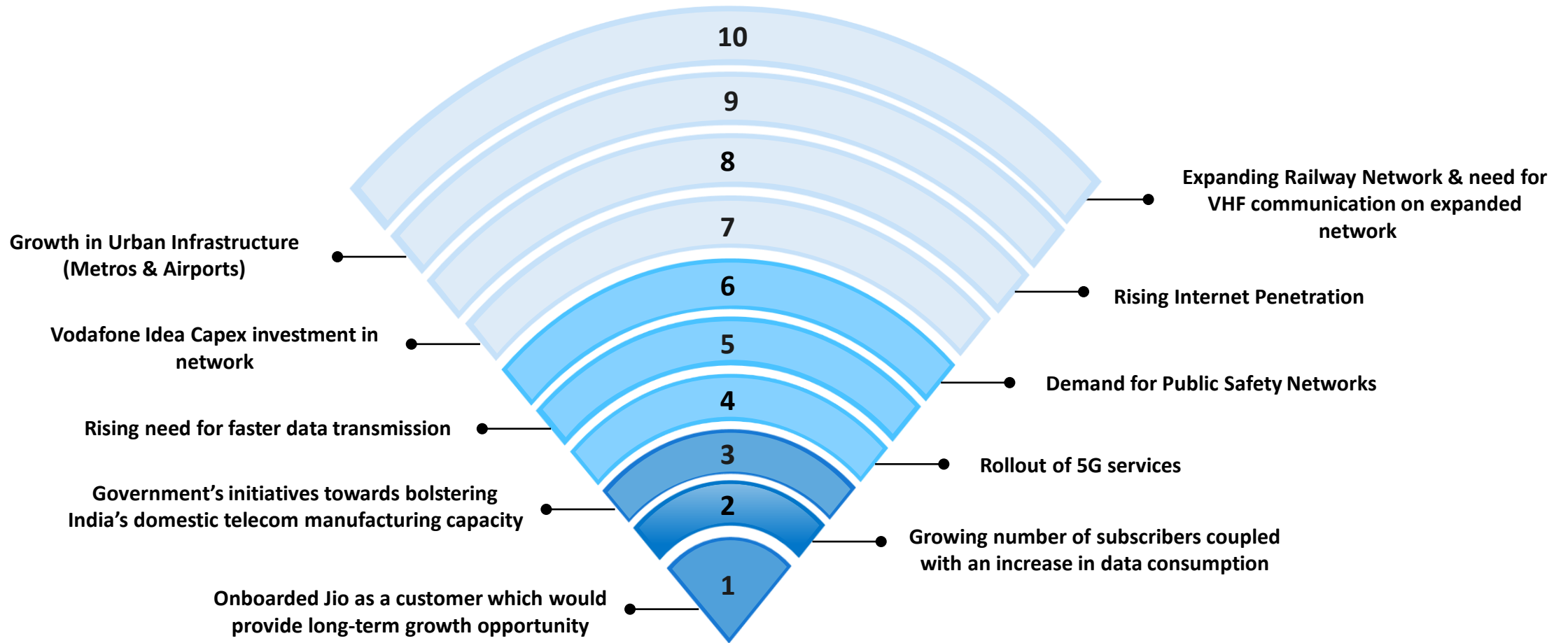


Sources: Omdia and Insight Partners  
 Source: <https://www.investindia.gov.in/pli-scheme-for-telecom>

## Est. Cumulative Spends Expected in India In the next 2-3 Years



# GROWTH DRIVERS



# MANAGEMENT COMMENTARY



**Commenting on FCL's performance, Mr. Konark Trivedi, Founder MD said:**

*"We are happy to share a strong overall financial and business performance for Financial Year 2023-2024, the revenue from operations grew by 16.68% to INR 1,577.33 Mn for FY24 as compared to INR 1,351.89 Mn in FY23. This growth was primarily fueled by increased investments in advanced telephony infrastructure by leading telecom operators, driven by strong demand for both data and voice services. Adj. EBITDA stood at INR 218.53 Mn in FY24, margins stood at 13.85%. PAT stood at INR 155.19 Mn for FY24 and margins stood at 9.84%.*

*As we march forward in the new financial year, we're excited to announce the addition of 7 new products in our portfolio led by our continuous focus to develop R&D led products. These products are used across various applications in telecom infra equipment like Mobile Networks, Railway communication Networks and Metros and Airports. We expect substantial growth in our IBS business and VHF Solution tailored for use in railways. Additionally, our focus on manufacturing services, coupled with the introduction of new products such as GPON ONT, FWA, UBR, and Ethernet cables, is expected to fuel our revenue growth. Lastly, we're nearing the finalization stages for commercial deployments for our Interference Mitigation System with operators.*

*Furthermore, we are also thrilled to announce our strategic move towards advancing our manufacturing capabilities by setting up SMT Line for PCB Assembly, thereby initiating our venture into the manufacturing services segment.*

*Notably, we anticipate increased sales from one of our clients for the ongoing 4G network upgrade and it's worth noting that our existing order book stands at ₹610.00 Mn as of 31<sup>st</sup> March 2024, reflecting continued confidence in our solutions and services.*

*On the industry front, the telecommunications landscape is witnessing a surge in capex of approximately \$5 Bn from Indian telecom operators. This aligns closely with the rapid deployment of 5G services and the ongoing enhancement of network infrastructure, reflecting a response to growing demand for data services. These investments underscore the industry's commitment to delivering superior network experiences and fostering digital inclusion nationwide.*

*Furthermore, our services continue to experience robust demand, driven by our well-established expertise and esteemed brand reputation. FCL maintains its prominent position within the telecom equipment sector. Our robust in-house R&D capabilities empower us to develop high-quality products that not only offer cost-effectiveness but also serve as viable alternatives to imports. Leveraging these R&D strengths, we have diversified our product portfolio to include offerings in the 5G, defense, and mobile network sectors, contributing to the advancement of connectivity nationwide.*

*Lastly, I would like to thank our shareholders, customers, and employees for their continued support. We look forward to another successful year ahead and remain committed to delivering value and growth for our shareholders."*

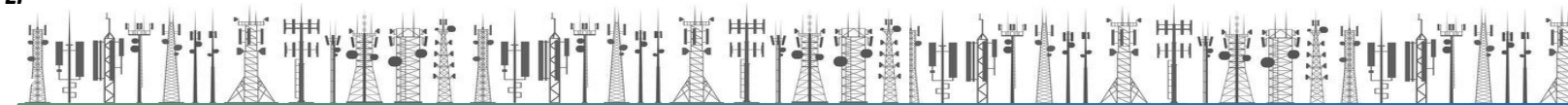


# CONSOLIDATED INCOME STATEMENT



Particulars (Rs. Mn)	Q4 FY24	Q4 FY23	YoY%	Q3 FY24	FY24	FY23	YoY
Revenue from Operations	444.97	311.31	42.93%	446.82	1,577.33	1,351.89	16.68%
Other Income	24.27	3.50		0.45	31.87	10.91	
<b>Total Income</b>	<b>469.25</b>	<b>314.82</b>	<b>49.05%</b>	<b>447.28</b>	<b>1,609.20</b>	<b>1,362.80</b>	<b>18.08%</b>
Total Expenses excl. D&A, Finance Cost & ESPS Cost	369.62	261.84		386.08	1,358.80	1,111.14	
<b>Adj. EBITDA (excl. Other Income and ESPS Cost)</b>	<b>75.36</b>	<b>49.47</b>	<b>52.32%</b>	<b>60.74</b>	<b>218.53</b>	<b>240.75</b>	
<b>Adj. EBITDA Margin (%)</b>	<b>16.94%</b>	<b>15.89%</b>	<b>104bps</b>	<b>13.59%</b>	<b>13.85%</b>	<b>17.81%</b>	
ESPS Expenses	-	-		14.45	14.45	-	
<b>EBITDA (excl. Other Income)</b>	<b>75.36</b>	<b>49.47</b>		<b>46.29</b>	<b>204.09</b>	<b>240.75</b>	
<b>EBITDA Margin (%)</b>	<b>16.94%</b>	<b>15.89%</b>		<b>10.36%</b>	<b>12.94%</b>	<b>17.81%</b>	
Depreciation & Amortization	12.06	5.42		6.54	31.13	16.08	
Finance Cost	2.92	0.24		1.56	4.71	5.35	
PBT	84.64	47.32		38.65	200.12	230.23	
Extra Ordinary Items	-	-		(0.67)	(0.67)	25.18	
<b>PBT</b>	<b>84.64</b>	<b>47.32</b>		<b>39.32</b>	<b>200.78</b>	<b>205.05</b>	
Tax	10.89	7.65		10.62	45.59	54.15	
<b>PAT</b>	<b>73.76</b>	<b>39.66</b>	<b>85.97%</b>	<b>28.69</b>	<b>155.19</b>	<b>150.90</b>	
<b>PAT Margin %</b>	<b>16.58%</b>	<b>12.74%</b>	<b>293bps</b>	<b>6.42%</b>	<b>9.84%</b>	<b>11.16%</b>	
Diluted EPS	4.79	3.00		1.86	10.08	11.41	

\*Other Income Includes ₹27.30 Mn on account of PLI



# CONSOLIDATED BALANCE SHEET



Particulars (₹ in Mn)	FY24	FY23
<b>Assets</b>		
PP&E	786.82	131.19
Capital WIP	-	358.88
Intangible Assets	29.52	2.56
Deferred tax assets	22.17	39.00
Long term loans and advances	6.32	33.55
Other Non-Current Assets	14.95	12.96
<b>Non-Current Assets</b>	<b>859.78</b>	<b>578.14</b>
Inventories	262.18	250.48
Trade Receivables	308.25	278.52
Cash & Cash Equivalents	14.28	201.98
Investments	0.52	0.52
Short term loans and advances	82.82	33.98
Other Current Assets	53.66	29.70
<b>Current Assets</b>	<b>721.70</b>	<b>795.18</b>
<b>Total Assets</b>	<b>1,581.49</b>	<b>1,373.32</b>

Particulars (₹ in Mn)	FY24	FY23
<b>Equity &amp; Liabilities</b>		
Equity Share Capital	154.35	153.75
Reserves & Surplus	1,173.34	1,007.63
Capital Reserve on Consolidation (net)	4.07	4.07
<b>Shareholders Fund</b>	<b>1,331.77</b>	<b>1,165.46</b>
Long Term Borrowings	0.11	-
Long Term Provisions	20.75	14.96
<b>Non-Current Liabilities</b>	<b>20.85</b>	<b>14.96</b>
Short-term Borrowings	46.92	-
Trade Payables	110.38	117.79
Other Current liabilities	68.30	63.53
Provisions	3.27	11.58
<b>Current Liabilities</b>	<b>228.87</b>	<b>192.91</b>
<b>Total Equity and Liabilities</b>	<b>1,581.49</b>	<b>1,373.32</b>



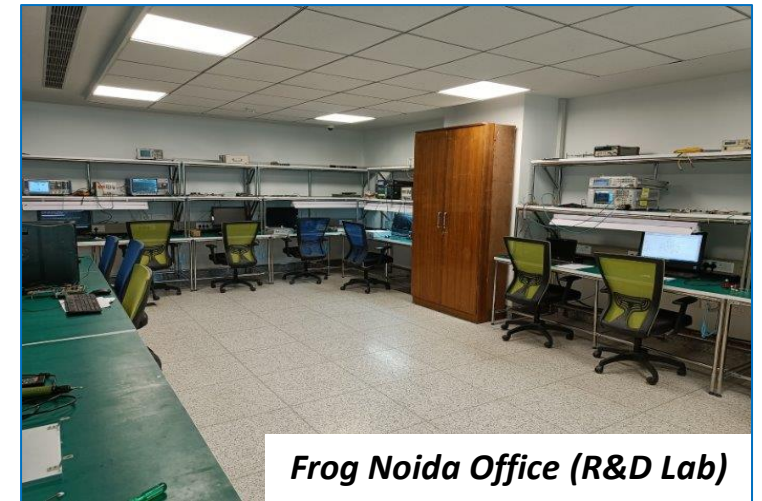
# CONSOLIDATED CASH FLOW STATEMENT



Particulars (Rs. Mn)	FY24	FY23
Net Cash Generation from operation	71.43	72.15
Net Cash Generated/ (Used in) investing activity	(302.74)	(346.44)
Net Cash Generated/ (Used) from Financing activity	43.60	349.22
Net Increase/(Decrease) in Cash and Cash Equivalents	14.28	201.98



# INFRASTRUCTURE



# AWARDS AND CERTIFICATIONS



Recognitions awarded by Great Place To Work®



FROG CELLSAT IS ISO 9001:2015, ISO 14001:2015 and OHSAS 45001:2018 certified



Frog Cellsat awarded SME Grading of CRISIL SME 1





# CAPITAL MARKET INFORMATION

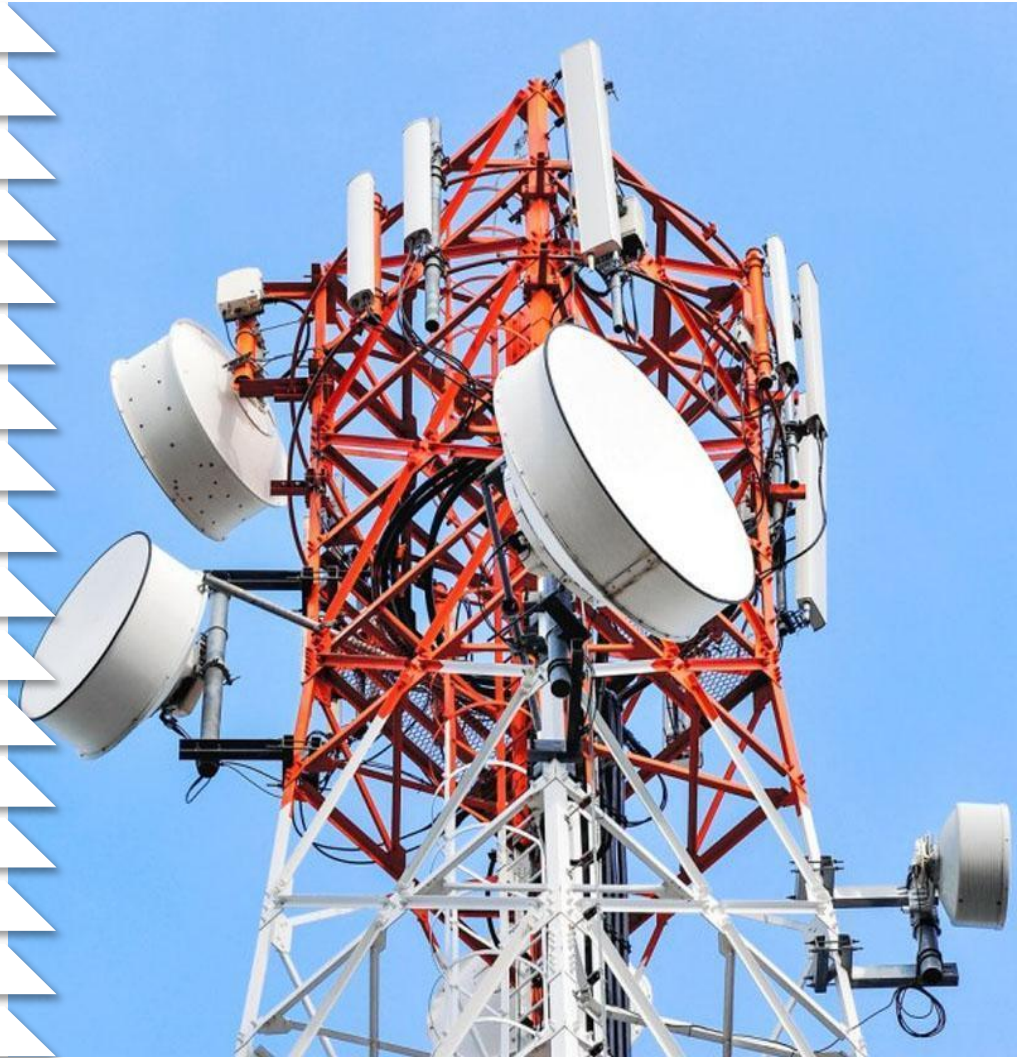


Price Data (As On 9 <sup>th</sup> May 2024)	INR
Issued Shares	1,54,35,600
CMP	₹196.50
52 week High/Low	₹311.55/₹131.50
Market Cap (INR Crs.)	₹303



# ABBREVIATIONS / DESCRIPTION

Term	Description
BTS	Base Transceiver Station
CPRI	Common Public Radio Interface
DAS	Distributed Antenna System
GPS	Global Positioning System
GSMA	Global System for Mobile Communications
IBS	In-Building Solution
IoT	Internet of Things
MIMO	Multiple Input Multiple Output
MVAS	Mobile Value-Added Services
RAN	Radio Access Network Frequency
RF	Radio Frequency
RRHs	Remote Radio Heads
RRUs	Remote Radio Units
SISO	Single Input Single Output
TRAI	Telecome Regulatory Authority of India
WANI	Wifi Access Network Interface





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# THANK YOU

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*For further information; please visit:  
[www.frogcellsat.com](http://www.frogcellsat.com)*

## **FROG CELLSAT LIMITED**

Manisha Makhija (CS)

**Contact:** 120-4859650

**Email:** [CS@frogcellsat.com](mailto:CS@frogcellsat.com)

## **Captive IR Strategic Advisors Pvt. Ltd**

Krunal Shah / Naman Maheshwari

**Contact:** +91 93724 67194

**Email:** [IR@frogcellsat.com](mailto:IR@frogcellsat.com)

