



FROG CELLSAT LIMITED

Investor Presentation December 2022





SAFE HARBOUR

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 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.

Focusing on
PM's Vision of
“Make in India”

Program by manufacturing world-class telecommunication equipment to provide better connectivity across India and the world



COMPANY AT A GLANCE



Leading manufacturers of telecom equipment's



18+ years of expertise in providing wireless coverage enhancement solutions



Highly experienced In house RF-planning, Implementation and Service Team



Expertise across the entire value chain of Designing, Manufacturing & Installation of Active DAS, RF Repeaters and Customized RF solutions



Constant R&D to develop new products to service evolving needs of telecom industries



State-of-the-art production and R&D facility in Noida and Dehradun

ISO-certified products that matches the quality of large companies

Reputed clientele comprises of top clients such as Airtel, Jio, Vodafone Idea, Adani, Motorola and others



Customer presence in India, Europe, SE Asia, Africa

Well-positioned in the industry for being price competitive, field-proven, future-ready, and dependability

GROUP STRUCTURE



FROG CELLSAT LIMITED

FROG TELE
PRIVATE LIMITED

The company is a **100%** subsidiary of FCL. It's an SPV company holding the Industrial land asset of the FCL.

FROG SERVICES
PRIVATE LIMITED

The company is a **100%** subsidiary of FCL and houses the services division of the FCL group.

SHIVA PROFILES
PRIVATE LIMITED

The company is a wholly owned subsidiary of Frog Cellsat. The company is currently in the process of amalgamation with Frog Cellsat Ltd.

INFRASTRUCTURE



Headquarters & Factory



Dehradun Factory



Noida: Service Office & Storage Facility



In-house Testing



In-house R&D

LEADERSHIP POOL



Mr. Konark Trivedi

Co-Founder & CEO

An engineer by qualification with over 25 years of experience in mobile and satellite communication
Holds a Bachelor's degree in Technology from Aligarh Muslim University (AMU), Aligarh and a Post-Graduation in Mobile and Satellite Communication from Westminster University, London.
Worked with leading companies including HCL and HFCL.



Mrs. Sonal Trivedi

Co-Founder & CPO

People's person with a rich experience of over 20 years in HR, Training, Admin & Culture Building
Has helped build a rich culture and healthy HR policies in Frog, helping company get "Great Place to Work", GPW – Women, Best in Telecom etc. recognitions.
Gold medallist in Master of Industrial Psychology from HNGBU and CELTA certified teacher (Certificate of English Language Teaching to Adults), from British Council, New Delhi (Cambridge Univ affiliated)
Has a passion for teaching English and has worked with British Council, Delhi and HACE, London.
Currently manages the People's departments of Frog Cellsat Ltd.



Mr. Charan Jeet Kalra

CFO

Company Secretary by profession
10+ years of experience in implementing strategic financial decisions and overlooking finance operations
Currently manages end-to-end operations such as Banking, Liquidity Management, Budgeting, Forecasting, Project funding, Auditing & Accounting, MIS & PL controls, others for Frog CellSat



Mr. Tarun Tularam Sharma

CTO

Leads FCL's long-term technology vision, and is responsible for R&D in coverage enhancement solutions for next-generation networks with emphasis on technology standards, innovation, customization and industry collaboration
He also facilitates the technical community within FCL
Prior to joining FCL in 2009, Mr. Sharma served at Nortel India's Knowledge Services division as a specialist on CDMA and WiMAX technology
Served as a head of Marketing & Systems SBU at India Satcom he extensively designed and implemented Satcom networks
Headed the Voice Communications Group at Reliance and was responsible for managing Carrier class switches, technology incubation, interoperability and integration with national carrier
Mr. Sharma started his career at Indian Air Force in 1989 as a commissioned officer in the technical branch and commanded a mobile communications unit, fulfilling strategic air defence communication need
He holds a Post Graduate Diploma in Management and a Bachelor of Science in Electronics and Communications Engineering from National Institute of Technology, Kurukshetra (erstwhile REC, Kurukshetra) with a specialization in Reliability Engineering.

EVOLUTION OVER THE YEARS



2004

Incorporated Frog CellSat and became Indian Sales Representative of CDMA. First customer – RCOM

2005

Started with repair service offerings

2006

Switched to a new business model of buying imported products and selling (Trading). Added new product "GSM Repeaters". Customer Addition: Nokia & Siemens

2007

Started I&C Services nationwide. Started R&D for in-house design of Repeaters. Customer Addition: Ericsson

2008

Set up the first manufacturing unit in Dehradun. Started the production of Repeaters based on in-house developed design

2010

Set up the Product Addition: WCDMA / 3G Repeater; IBS Accessories, Customer Addition: Uninor

2011

Crossed a plateau of ₹10 Crore in Revenue

2012

Product Addition: LTE / 4G Repeater

2014

Product Addition: Jumpers, Started BTS-related services, Customer addition: Vodafone,

2015

New Production Unit at Noida, Started Exporting products, Crossed a plateau ₹50 Crores in revenue

2016

R&D Got DSIR Approval, Product Addition: Duplexers/ Filters,

2017

Product Addition: Optical DAS

2020

Product Addition: Common Public Radio Interface (CPRI)

2021

Crossed a milestone of ₹100 Crore in Revenues, Product Addition: RET Cable, SFP, Small Cell Antenna

2022

Company listed on NSE – SME Platform, Application approved under Design led manufacturing PLI scheme worth over ₹660 Mn

CREATING CONSISTENT VALUE FOR INVESTORS



Revenue
23.9%
CAGR

EBITDA
77.3%
CAGR

PAT
225.6%
CAGR

ROCE
23.1%

ROE
18.8%

Debt
free
company

No. of
products:
14+

40+ Cr.
Order Book
as on 30th
Sep, 2022

PRODUCT OVERVIEW



Product	Product Description	Application	Product Image
<p>Network Accessories</p> <p>-Includes Jumpers, CPRI, RET Cable, Multiplexers, Filters, SFP, Feeder Cable</p>	<p>Network accessories are used to combine, split, switch, boost, or direct packets of information along telecommunications network.</p>	<p>Products for integrating mobile cell site.</p>	
<p>Digital Repeaters</p>	<p>Enhances cellular coverage in dark zones for a single operator</p>	<p>Improving mobile signal indoors for small to mid size area like offices, residencies, etc - Providing mobile coverage in remote areas</p>	
<p>Optical DAS</p>	<p>Optical Distributed Antenna System supports multi-technologies and multi-operators for cellular coverage to medium and large facilities</p>	<p>Improving mobile coverage in large size venues like stadiums, airports, etc - Covers all cellular bands and public safety bands</p>	
<p>Antenna</p>	<p>Antennas radiate RF power and illuminate the dark zones</p>	<ul style="list-style-type: none"> - Provides BTS coverage - Provides small cell coverage 	
<p>IBS Accessories</p>	<p>Provides indoor coverage using a series of hubs/Equipment's distributing the signal to number of antennas</p>	<ul style="list-style-type: none"> - Products for integrating solution for inbuilding mobile coverage - Includes Yagi/panel/omni antenna, RF splitters/combiners, dummy load 	

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 & Deployment Troubleshooting & Rectification.

BTS, MW & Small Cell I&C

Installation and Roll-out Services includes:

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 and Optimization
ODU Upgradation, Site Relocation, GSM Antenna / RRU Hight 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



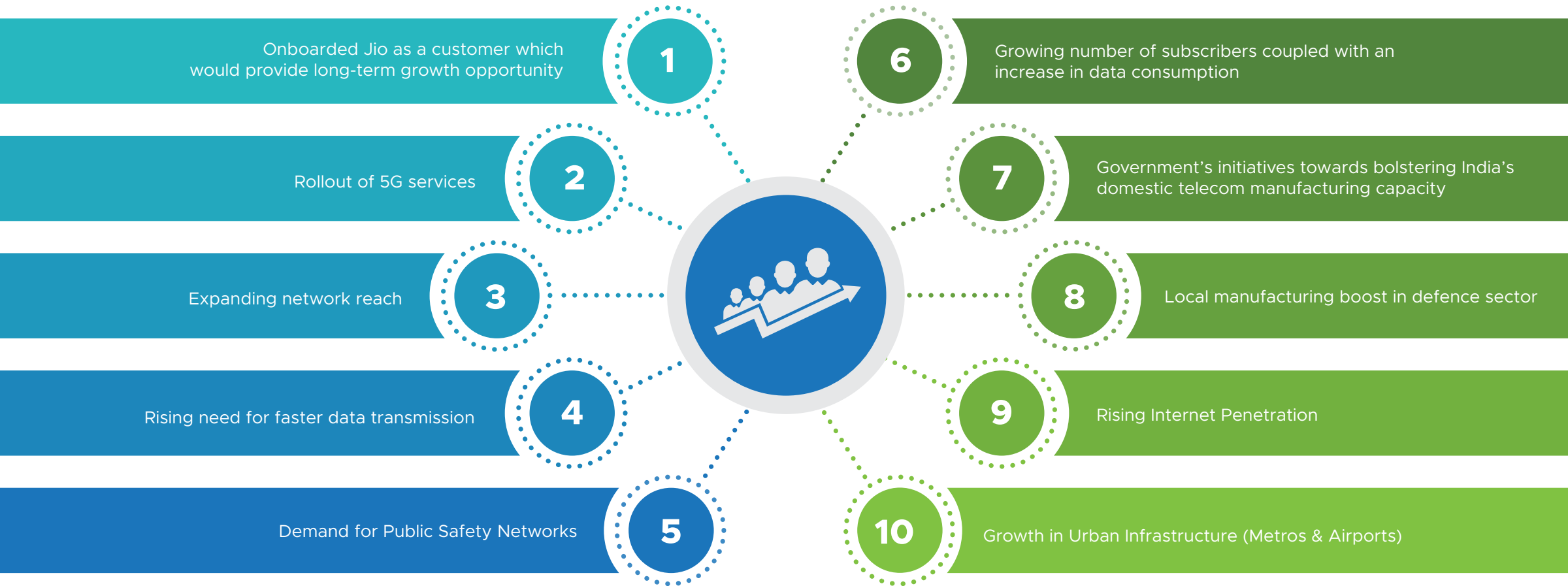
Government & Defence



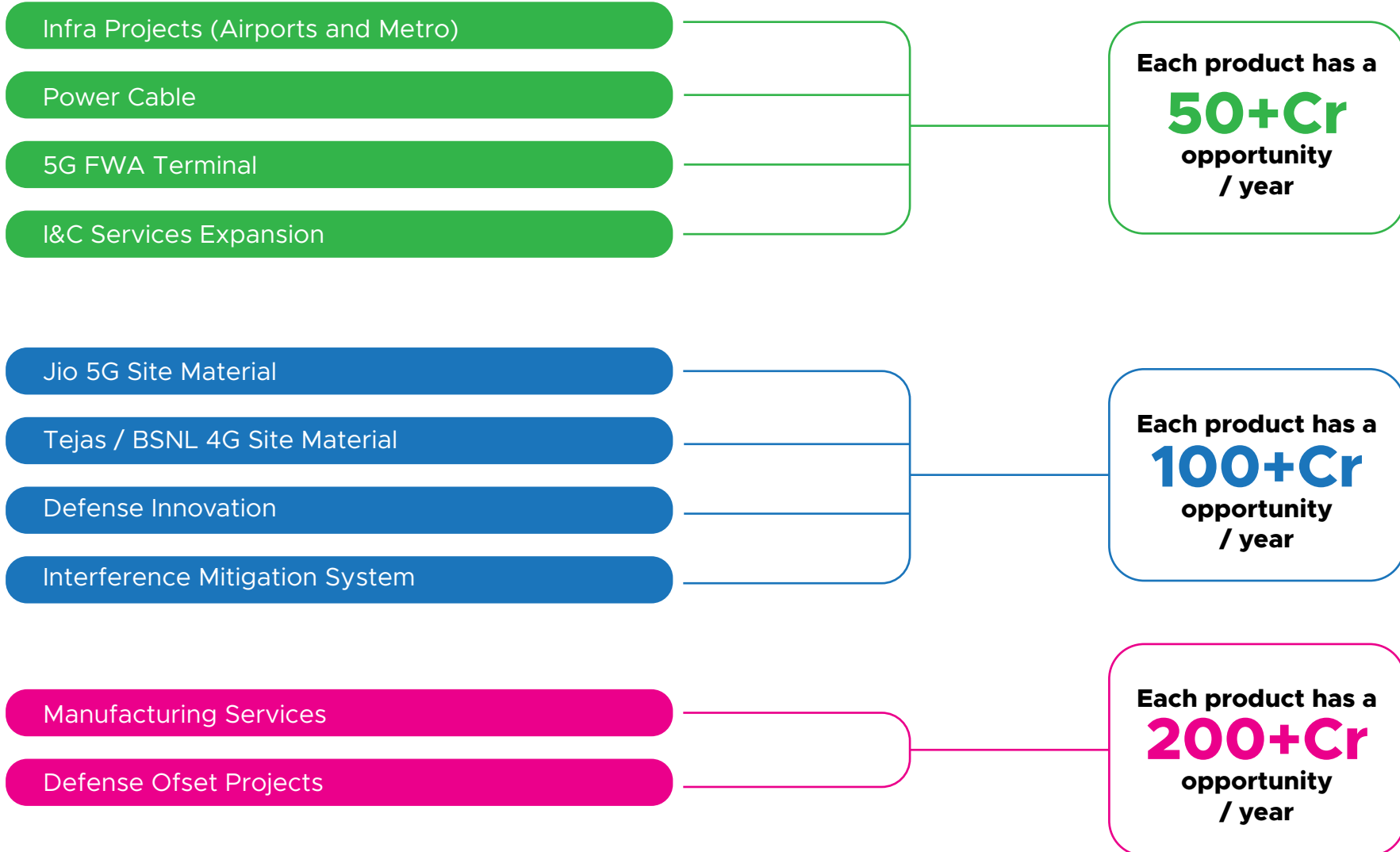
International Mobile Operators & SI



GROWTH DRIVERS



OPPORTUNITIES FOR GROWTH



FCL HAS A WIDE RANGE OF PRODUCTS TO CATER TO MULTIPLE INDUSTRIES



TELECOMMUNICATION INDUSTRY

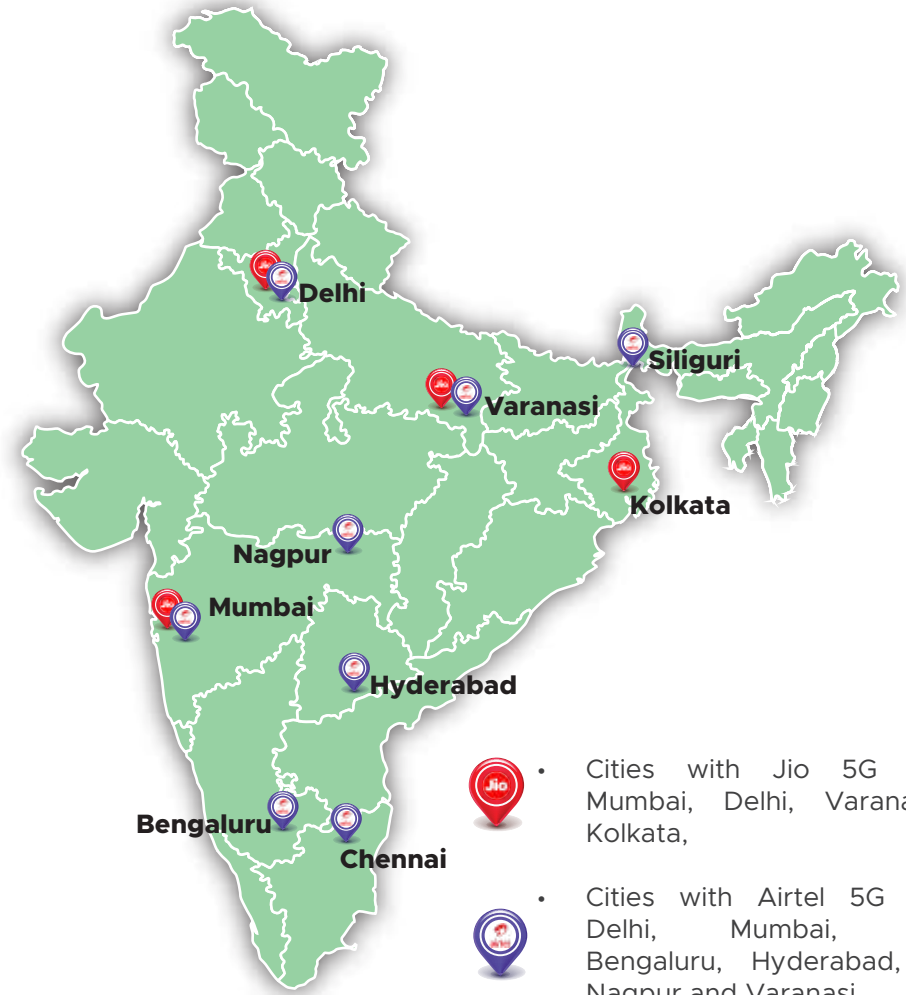
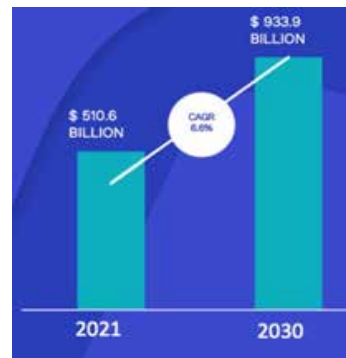
- The global telecom equipment market size is growing at a rapid pace, due to increasing numbers of cellular stations and the demand for next-generation-ready network equipment led by the advent of 5G networks
- With the faster deployment of 5G and wider coverage of existing technology, the total addressable market for telecom equipment industry is expected to reach **\$933.9 Bn by 2030**

GLOBAL TELECOM EQUIPMENT MARKET

- India is witnessing tremendous growth in domestic manufacturing of telecom equipments which find multifaceted application across sectors like mobile telephony, defence, compact infrastructure on back of the government's mission to make India "Atmanirbhar"
- The telecom industry in India is the second-largest in the world and it will mostly likely add 500 Mn internet users over the next five years led by rise in mobile-phone penetration and a decline in data costs
- Government of India (GoI) aims to make India a new telecom equipment manufacturing hub and nurture home companies and is expected to boost export of Telecom and Networking Products under "Make in India" initiative.

HIGHLIGHTS ON TELECOM COMPANIES

- Telecom companies like Jio, Airtel, Vodafone have already rolled out their 5G services
- The top two operators "Jio" and "Airtel" will spend on network equipment and laying fibre as they target launching ultrafast 5G networks in the coming months
- Jio: India's top telecom mobile operator, has earmarked a spending of \$25 bn on the rollout of its 5G services that it plans to debut in key cities this Diwali in October (source: <https://techcrunch.com/2022/08/29/reliance-jio-to-debut-5g-in-october-reach-all-by-2023-end/>).



- Cities with Jio 5G services: Mumbai, Delhi, Varanasi, and Kolkata,
- Cities with Airtel 5G services: Delhi, Mumbai, Chennai, Bengaluru, Hyderabad, Siliguri, Nagpur and Varanasi.

DEFENCE INDUSTRY

- FCL is engaged in various projects of national importance and has forayed into repair and maintenance of electronics parts used in old tanks and aircrafts; in developing and manufacturing parts locally which so far was only imported for example Avalanche Victim Detector (AVD), Power Amplifiers for Radar Applications, etc.
- With the current Indian defence budget, there is a renewed focus on AtmaNirbhar theme which focuses on optimizing usage of Indian products. FCL has capatilised on this opportunity which would further aid the company's top-line.

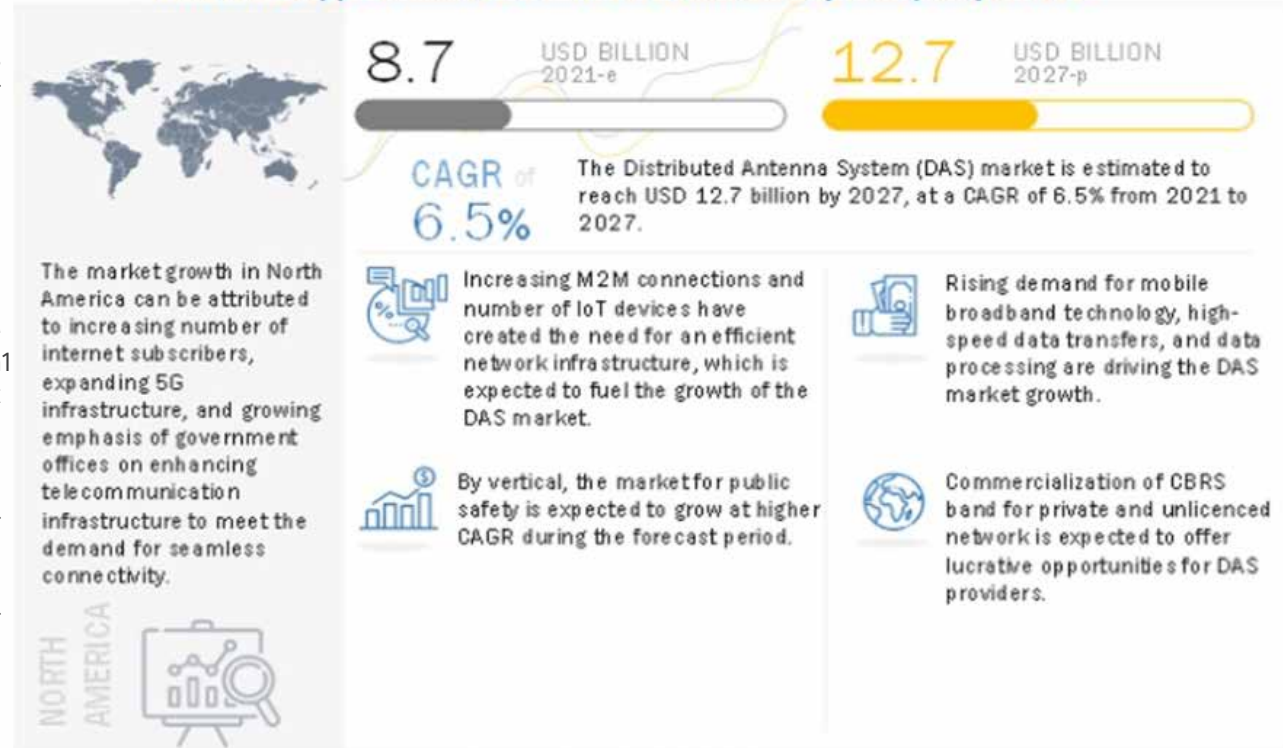
INFRASTRUCTURE INDUSTRY

- Infrastructure sector is key driver of the Indian economy, currently the government has taken infrastructure and industrial projects worth ~\$1.3 tn1
- To build and improve the nation's telecom infrastructure, the government has assigned the Department of Telecommunications a budget of \$11.11 bn4.
- 5G rollout, increase in number of mobile users and rising demand for data access across the globe has amplified the demand better cellular coverage and public safety networks
- To capatilize on the opportunity, FCL has been focusing on upgrading/adding products to serve the growing demand of cellular service providers.

DISTRIBUTED ANTENNA SYSTEM (DAS)2 (TAKE INPUT FROM THE MANAGEMENT)

- DAS are used to improve mobile coverage in large size venues like metros, airports, etc and areas like high-rise buildings, tunnels, shopping malls.
- The DAS market is projected to grow from **\$8.7 Bn in 2021 to \$12.7Bn by 2027.**
- Mobile data traffic, growing number of connected devices due to Internet of Things, rising demand for extended network coverage and uninterrupted connectivity, increasing construction of buildings based on modern and sustainable concepts and public safety connectivity.

Attractive Opportunities in Distributed Antenna System (DAS) Market



e-estimated, p-projected

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STEP AHEAD R&D INVESTMENT IN ORDER TO CAPTURE GROWTH OPPORTUNITIES



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)	Minimum 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%)
Total	16.00	158.40	1,056.00	1,095.00	1,056.00	1,056.00	66.24

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	Digital DAS	Yet to Start
P08	Jammer	Yet to Start
P09	4G/5G CPE	Yet to Start
P10	4G/5G Small Cells	Yet to Start
P11	GPON OLT	Yet to Start
P12	GPON ONT/ONU	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

FINANCIALS PROFIT & LOSS STATEMENT

Particulars (₹ in Mn)	H1 FY23	FY22	FY21	YoY%
Revenue from Operations	657.97	1329.44	1209.22	9.94%
Other Income	4.43	29.36	84.76	
Total Revenue	662.40	1358.80	1293.99	5.01%
Total Expenses excluding Depreciation, Amortization & Finance Cost	550.41	1130.40	1107.94	
EBITDA	107.56	199.04	101.29	96.51%
EBITDA Margin (%)	16.35%	14.97%	8.38%	659bps
Depreciation & Amortization	7.03	13.57	17.69	
Finance Cost	4.22	5.98	12.26	
PBT	100.74	208.85	156.10	33.79%
Tax	29.05	61.39	28.86	
PAT	71.68	147.46	127.23	15.90%
PAT Margin %	10.89%	11.09%	10.52%	57bps
Diluted EPS	6.34	13.05		

Note : Other income in FY21, includes extraordinary income from sale of property under a subsidiary
Expenses in H1 FY23, includes IPO expenses of ₹25.1 Mn

FINANCIALS BALANCE SHEET



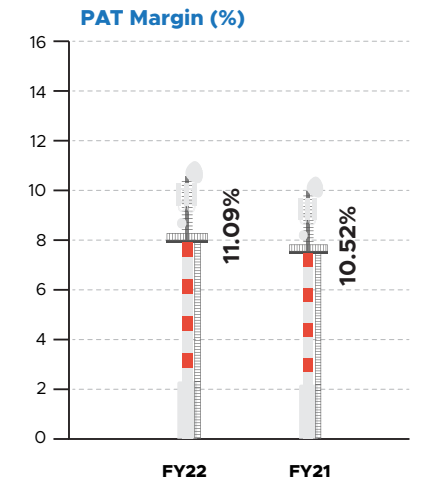
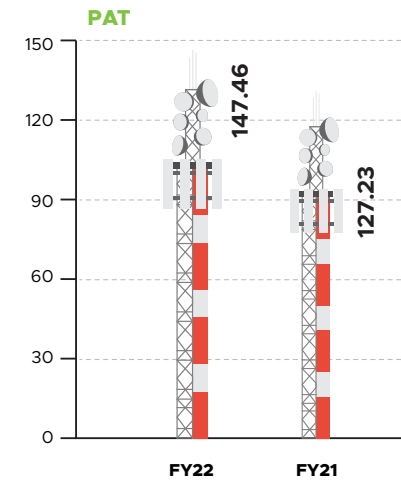
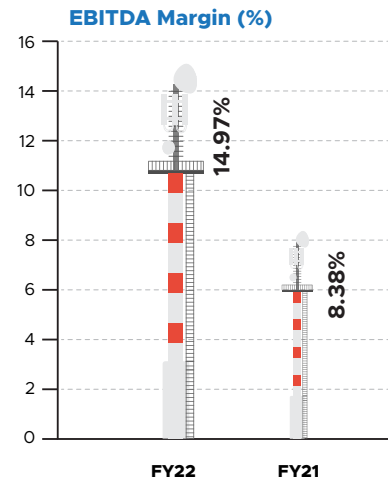
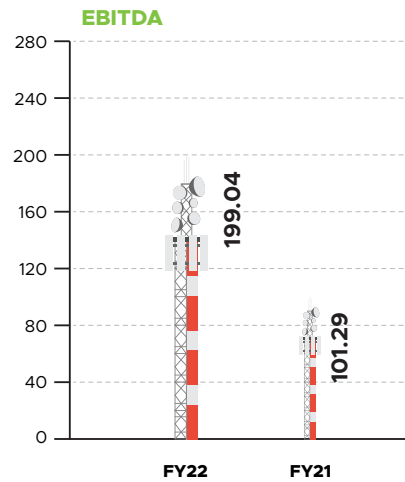
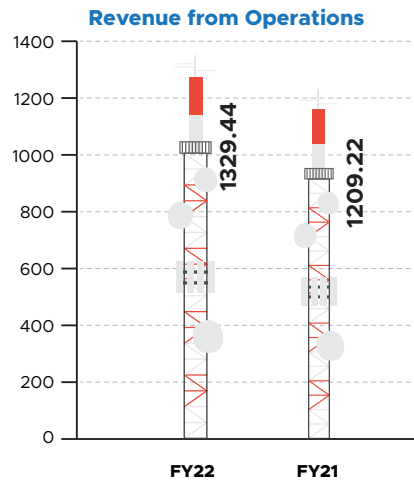
Particulars (₹ in Mn)	As on 31.03.21	As on 31.03.22	As on 30.09.22
Assets			
Non-Current Assets			
PP&E	51.70	61.67	57.54
Capital WIP	-	70.51	158.93
Intangible Assets	1.11	0.41	0.29
Goodwill on consolidation	93.56	93.56	90.59
Investments	39.74	48.14	51.99
Deferred tax assets	11.63	26.13	37.04
Long term loans and advances	65.90	16.40	16.44
Other Non-Current Assets	27.58	31.61	6.99
Total Non-Current Assets	291.21	348.42	419.81
Current Assets			
Inventories	163.94	238.14	349.11
Trade Receivables	267.15	196.74	299.03
Cash & Cash Equivalents	162.86	127.05	114.28
Investments	17.28	0.52	0.52
Short term loans and advances	20.76	45.72	28.02
Other Current Assets	4.04	5.59	11.23
Deferred government grant receivables	0.90	10.30	-
Total Current Assets	636.93	624.05	802.18
Total Assets	928.14	972.46	1,221.99

FINANCIALS BALANCE SHEET

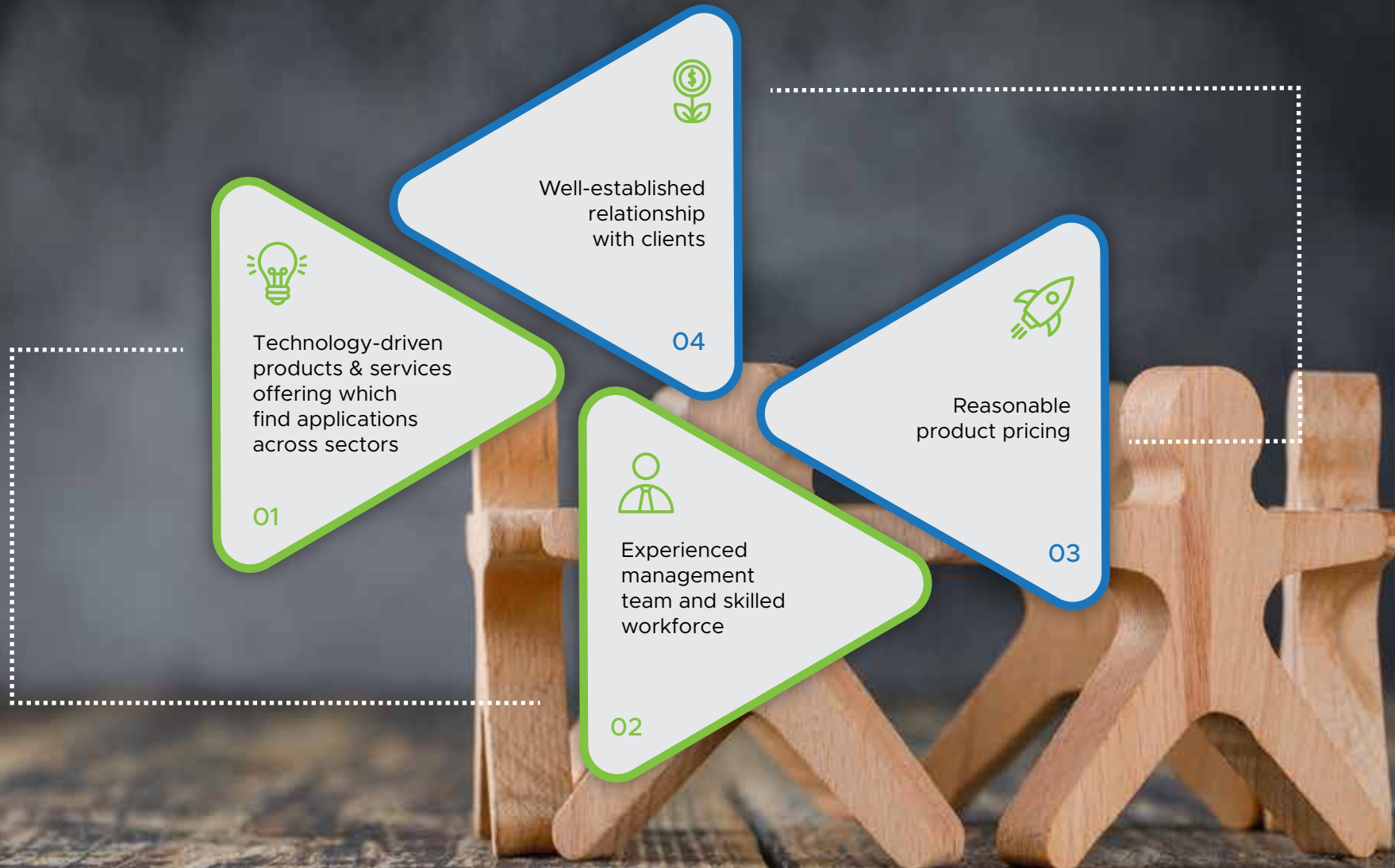


Particulars (₹ in Mn)	As on 31.03.21	As on 31.03.22	As on 30.09.22
Equity and Liabilities			
Shareholders Fund			
Equity Share Capital	0.50	0.50	113.00
Reserves & Surplus	591.16	689.12	647.75
Total Shareholders Fund	591.66	689.62	760.75
Non-Current Liabilities			
Long Term Borrowings	46.59	27.27	21.92
Long Term Provisions	15.10	9.43	11.45
Other Current liabilities	-	-	6.41
Total Non-Current Liabilities	61.68	36.71	39.78
Current Liabilities			
Borrowings	10.71	34.52	86.83
Trade Payables			
- O/S dues of micros & small enterprises	11.94	53.53	75.84
- O/S dues of creditors other than above	230.31	99.96	192.67
Other Current liabilities	20.75	53.18	51.41
Provisions	1.07	4.96	14.73
Total Current Liabilities	274.79	246.14	421.47
Total Equity and Liabilities	928.14	972.46	1,221.99

FINANCIALS GRAPHS



KEY BUSINESS STRENGTHS



STRATEGIC OVERVIEW



Investments in R&D to be in track with the upcoming technology.



Expanding global presence.



Strong pipeline of products having very specific applications catering to multiple industries.



Providing special products to Airtel to mitigate interference in their networks.

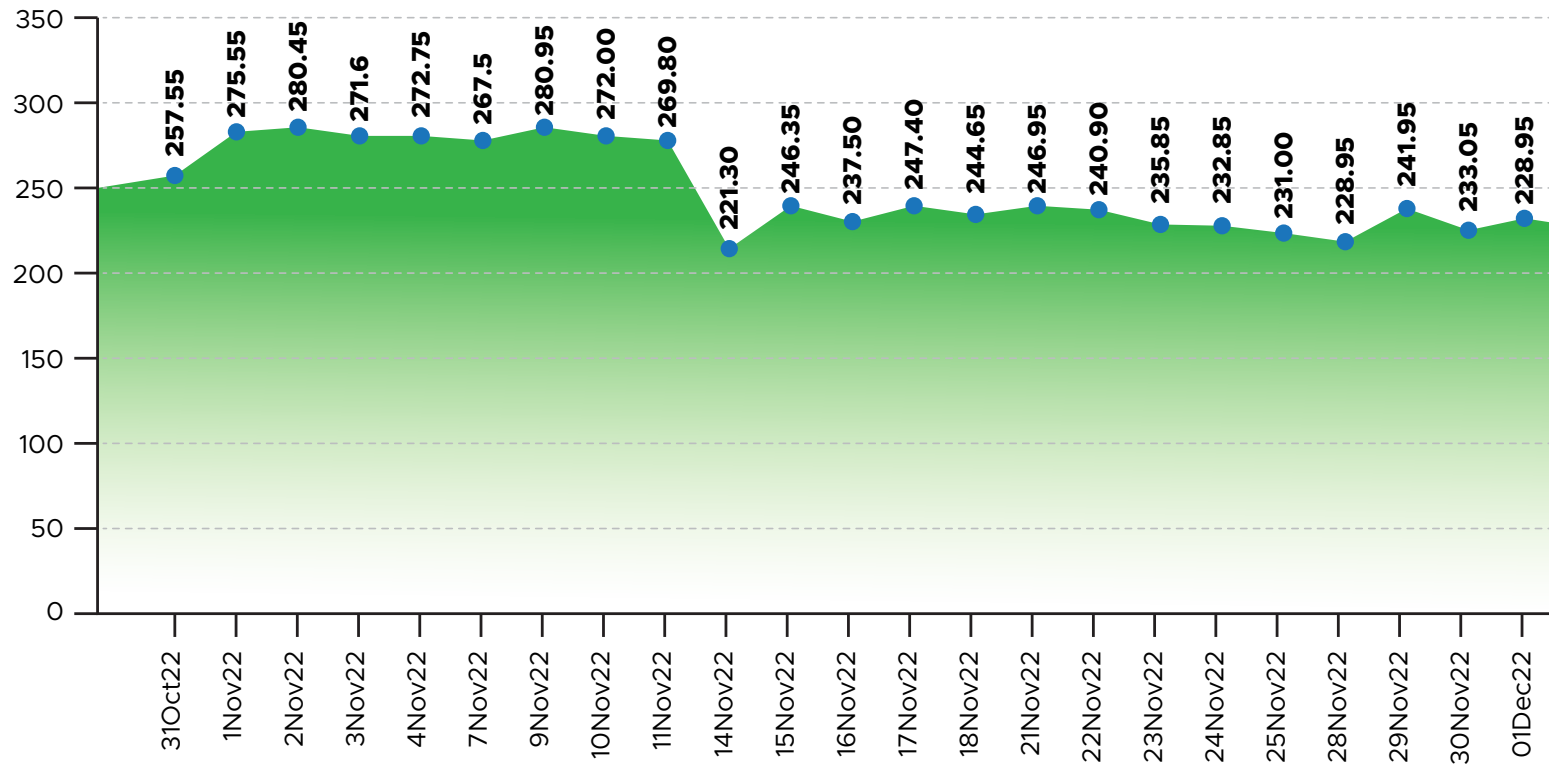


Our continuous efforts to develop new products have been also backed by the GOI's Design-Led manufacturing PLI scheme which showcases our product development strength and our contribution to digitally advanced India.

CAPITAL MARKET INFORMATION



Share Price Movement



Market Indicators

Issued Shares	40,75,200
Share Price (06-12-2022)	₹245.00
Market Cap (₹ MN)	₹3,780.00
52 Weeks High/Low	₹297.00/₹215.85

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
RF	Radio Frequency
RRHs	Remote Radio Heads
RRUs	Remote Radio Units
SISO	Single Input Single Output
TRAI	Telecom Regulatory Authority of India
WANI	Wifi Access Network Interface



For further information on the Company,
please visit: www.frogcellsat.com

Thank You

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