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IPO Note – Railtel Corporation of India Limited

15-February-2021

RETAIL RESEARCH

Railtel Corporation of India Ltd

Issue Snapshot:
Issue Open: Feb 16 – Feb 18, 2021

Price Band: Rs. 93 –94

Issue Size: 87,153,369 eq shares
(Entirely Offer for sale)

Issue Size: Rs. 810.5 – 819.2 cr

Reservation for:

QIB	Upto	43,326,683 eq sh
Non Institutional	atleast	12,998,006 eq sh
Retail	atleast	30,328,680 eq sh
Employee	Upto	500,000 eq sh

Face Value: Rs 10

Book value: Rs 43.45 (September 30, 2020)

Bid size: - 155 equity shares and in multiples thereof

100% Book built Issue

Capital Structure:

Pre Issue Equity:	Rs. 320.94 cr
Post issue Equity:	Rs. 320.94 cr

Listing: BSE & NSE

Book Running Lead Manager: ICICI Securities Limited, IDBI Capital Markets & Securities Limited, SBI Capital Markets Limited

Registrar to issue: KFin Technologies Private Ltd

Shareholding Pattern

Shareholding Pattern	Pre issue %	Post issue %
Promoter and Promoter Group	100.0	72.8
Public & Employee	0.00	27.2
Total	100.0	100.0

Source for this Note: RHP

Background & Operations:

Railtel Corporation of India Limited (RCIL) is an information and communications technology ("ICT") infrastructure provider and is one of the largest neutral telecom infrastructure providers in India. It is a Mini Ratna (Category-I) Central Public Sector Enterprise, wholly-owned by the Government of India and under the administrative control of the Ministry of Railways. It was incorporated on September 26, 2000 with the aim of modernizing the existing telecom system for train control, operation and safety and to generate additional revenues by creating nationwide broadband and multimedia network by laying optical fiber cable by using the right of way along railway tracks. As of January 31, 2021, its optical fiber network covers 59,098 route kilometers and covers 5,929 railway stations across towns and cities in India. The transport network is built on high capacity dense wavelength division multiplexing ("DWDM") technology and an Internet protocol/ multi-protocol label switching ('MPLS") network over it to support mission critical communication requirements of Indian Railways and other customers. RCIL operates data centers in Gurugram, Haryana and Secunderabad, Telangana to host and collocate critical applications for customers including the Indian Railways. In addition to strategic and critical network infrastructure services, it also undertake various ICT projects for the Indian Railways, central government and state governments, including various train control system projects for Indian Railways.

RCIL offers a diverse range of services across industries. Its portfolio of services is broadly classified as below:

Telecom Network Services:

- ***National Long Distance (NLD) Services*:** It provides digital capacity to carry long distance telecommunication services including various tele-services such as voice, data, fax, text, video and multimedia.

- ***Internet Service Provider (ISP) Services*:** As part of ISP services, RCIL offers enterprise customers Internet leased line services with multiple bandwidth options ranging from 2 MBPS and above across India. It also offers retail broadband services through its 'RailWire' platform.

Telecom Infrastructure Services:

- ***Passive Infrastructure ("IP-1") Services:*** RCIL provides storage, power, cooling, and physical security for servers and networking equipment of its customers and connect them with a variety of telecommunications and network service providers. It also provides single core dark fiber for transmission of digital video signals to multiple system operators ("MSOs") for cable distribution.

Managed Data Center and Hosting Services

- ***Data Centre and Managed Hosting Services*:** RCIL offers a variety of data centre services including Infrastructure as a Service or IaaS, dedicated hosting, managed services, cloud computing, managed e-Office services, disaster recovery services, Aadhar authentication services and other IT related services such as load balancing services, application hosting, bandwidth services and advanced firewall services.

- ***Telepresence Services ("TPaaS")*:** It offers end-to-end, high-definition, secure, hosted multitenant video conferencing facility bundled with required bandwidth as a service.

- ***Security Operations Centre as a Services ("SOCaaS")*:** Security operations centre ("**SOC**") of RCIL provides centralized and consolidated cyber security incident prevention and security event monitoring services, it has detection response capabilities and supports requirements of other business units.

Projects (System Integration Services)

- ***ICT Hardware, Software and Service System Integration Projects***: RCIL collaborate with partners and OEMs to undertake ICT hardware implementation, software delivery and digital transformation projects including creation of state wide area network ("**WAN**") and its maintenance, data center and facility management services, Wi-Fi projects, city surveillance projects, laying of state wide fiber optic network and its maintenance, implementation and maintenance of end-to-end IT applications of enterprises.

- ***Digital Services*:** RCIL also collaborates with partners who offers solutions/ applications that are hosted on its data centers, it offers digital services including unified communications, Wi-Fi as a service, e-tendering/ e-auction/ smart payments and disaster management services

- ***Other Services*:** Other services offered by RCIL includes consultancy services for ICT services and solutions and signaling services including signal design and design automation software tools for the Indian Railways.

RCIL has a strategic relationship with the Indian Railways and it undertakes a wide variety of projects including provision of mission critical connectivity services such as Video Surveillance System ("VSS") at stations and within trains, 'e-Office' services and implementing short haul connectivity between stations and long haul connectivity to support various organizations within the Indian Railways. It also undertakes various passenger services including Content on Demand ("CoD") services and Wi-Fi across major railway stations in India. Its experience and expertise in handling and undertaking telecom and ICT projects, has led RCIL to be selected for implementation of various mission-mode projects for the GoI including rolling out the National Knowledge Network ("NKN"), Bharat Net (formerly, the National Optical Fiber Network) and USOF funded optical fiber based connectivity project in North East India.

Objects of Issue:

The objects of the Offer are: (i) to carry out the disinvestment of 87,153,369 Equity Shares by the Selling Shareholder; and (ii) to achieve the benefits of listing the Equity Shares on the Stock Exchanges. RCIL will not receive any proceeds from the Offer and all proceeds shall go to the Selling Shareholder. Further, the Company expects that listing of the Equity Shares will enhance its visibility and brand image and will also provide a public market for the Equity Shares in India.

Competitive Strengths

Among the largest neutral telecom infrastructure providers in India with pan-India optic fiber network: RCIL is one of the largest neutral telecom infrastructure providers in India. As of January 31, 2021, it has exclusive right of way along 67,415 route kilometers connecting 7,321 railway stations for laying optical fiber cable. It has 59,098 route kilometers of optical fiber cable network and has connected 5,929 railway stations across towns and cities in India, as of January 31, 2021. It has city wide access network that stands at over 18,000 kilometers as of January 31, 2021. RCIL offers high capacity bandwidth of up to 800G at 87 locations in India, as of January 31, 2021. It offers leased line and VPN facilities and also provides IP-1 services. Its pan-India network comprises various technologies including next generation network ("NGN"), packet transport network, DWDM and IP-MPLS that are maintained by its network operations centers ("NOCs") at Mumbai, Delhi, Kolkata and Secunderabad to provide VPN, point-to-point leased line to enterprises, public sector banks, defense organisations and educational institutions. In addition, it has a Central Network Operations Centre located at New Delhi that monitors the entire pan-India network. It has installed point-of-presence ("PoPs") across cities and towns in India.

RCIL also provides strategic and critical network infrastructure to the GoI and certain state governments including the NKN project, a national project aimed at connecting higher education and research institutions on a single high speed broadband network, where it has been selected as one of the implementing partners to provide high capacity bandwidth services. It is also an implementing partner for the Bharat Net project to create optical fiber cable based broadband infrastructure in laying optical fiber cable across 36,000 gram panchayats in India. As of January 31, 2021, it had 305,746 users of its 'RailWire' service. The number of subscribers has increased 2.55 times since April 30, 2020 when the number of subscribers was 119,515. As part of its operations, it has entered into arrangements with access network providers ("ANPs") to deliver the last mile connectivity services to customers. As of January 31, 2021, it entered into such arrangements with 5,023 ANPs across India. This model enables RCIL to better manage its cash flows and helps increase its profitability.

Diversified portfolio of services and solutions RCIL offers a diversified portfolio of ICT services and solutions including MPLS-VPN, leased lines services, TPaaS, e-Office services and data center services, large network hardware system integration, software and digital services. In addition to laying optical fiber cable network, its transport network is built on high capacity DWDM and an IP/ MPLS network over it to support communication requirements of the Indian Railways and other key customers. It has also built its optical fiber cable network across cities and towns in India to provide end-to-end bandwidth services through leased circuits, MPLS-VPN ports or Internet bandwidth ports. As of December 31, 2020, it has connected 5,034 MPLS-VPN ports and 895 Internet bandwidth ports for its customers. In addition, it provides NLD connectivity for Indian Railways exchanges on NGN technology handling over 0.89 million minutes per month, as of December 31, 2020. The Company also offers digital subscriber line access multiplexer for broadband at railway colonies and provide Wi-Fi in various offices of the Indian Railways.

Key partner to the Indian Railways in digital transformation*:* RCIL serves as a key network for the Indian Railways. It provides a variety of services to the Indian Railways and has implemented MPLS data network for integrated payroll and accounting system, unreserved ticketing system, freight operations information system and coaching operations information systems. It is also working with the Indian Railways to transform railway stations into digital hubs by providing public Wi-Fi at railway stations across India. As of January 31, 2021,

5,929 railway stations were live with 'RailWire' Wi-Fi and recorded 16.04 million unique users in Fiscal 2020. It recorded an average of 30.01 million user logins per month in Fiscal 2020, and an average of 9,262 TB of aggregated data consumption per month in Fiscal 2020.

RCIL has implemented the 'e-Office' project for the Indian Railways. Other projects with Indian Railways includes implementing CoD services to passengers and the Railway Display Network ("RDN") to provide contextual railway related information, public awareness messages and entertainment content to rail users using digital technologies. It is awarded mandates by the Indian Railways on a nomination basis, owing to its unique infrastructure along railway tracks, technical capabilities and its longstanding relationship with the organization. This also enables the Company to source mandates from other public sector entities that rely on its track record of serving the Indian Railways. Its strategic relationship with the Indian Railways and its capability to provide a diverse range of ICT services and solutions has enabled RCIL to grow business.

Experience in executing projects of national importance with a robust pipeline of projects: RCIL has been successfully completed a number of long-term projects for provision of ICT services across India. These includes the NKN and Bharat Net (formerly, the National Optical Fiber Network) projects for providing high capacity bandwidth pipes for educational institutions of higher learning and laying optical fiber cable for connectivity of gram panchayats in India. It is also executing projects for public sector enterprises. For ESIC it has undertaken operations and maintenance of the network and infrastructure operations in connection with implementation of social security programme that enables stakeholders to avail anytime, anywhere healthcare services across the country and creation of a medical database. It has been successfully completed a number of long-term projects for provision of ICT services across India. These includes the NKN and Bharat Net (formerly, the National Optical Fiber Network) projects for providing high capacity bandwidth pipes for educational institutions of higher learning and laying optical fiber cable for connectivity of gram panchayats in India. It is also executing projects for public sector enterprises. For ESIC it has undertaken operations and maintenance of the network and infrastructure operations in connection with implementation of social security programme that enables stakeholders to avail anytime, anywhere healthcare services across the country and creation of a medical database.

RCIL also provides network services to connect data centers, disaster recovery centers, regional offices, branch offices for the Reserve Bank of India, various public sector banks and stock exchanges in India. It also provides bandwidth connectivity services, managed IT services and data-center infrastructure services for an agency of the Indian armed forces at various locations across India. It provides IP-MPLS and internet bandwidth connectivity at multiple locations of the Employee Provident Fund Organisation in India and also provides operations and maintenance services for bandwidth connectivity services. The links are been monitored from its centralized network operations center in New Delhi. For this project, the Company has supplied, installed and commissioned necessary network hardware for network connectivity at sites. It has also been awarded a number of projects that it is currently implementing and executing. These include the Kerala Fiber Optic Network project where it is a part of the consortium that involves provision of scalable and resilient optic fiber across Kerala. RCIL has also set up such e-offices for a number of government entities. It has also submitted a proposal to a state government for providing training and hand-holding for implementation of e-office including disaster recovery services.

Strong track record of financial performance: RCIL has established a consistent track record of financial performance and growth. It has been profitable since Fiscal 2007 and has consistently declared and paid dividends since Fiscal 2008 and in Fiscal 2018, 2019 and 2020 and in the six months ended September 30, 2020, it paid dividend of Rs 515.30 million, Rs 624.70 million, Rs. 462.00 million and Rs. 200.00 million, respectively. Its net worth has been positive since incorporation and has been consistently growing and was Rs. 12,291.77 million, Rs. 12,890.85 million, Rs. 13,693.56 million and Rs. 13,946.30 million in Fiscal 2018, 2019 and 2020 and in the six months ended September 30, 2020, respectively. Its operations have been funded entirely by internal accruals since Fiscal 2013 and it is a debt-free company. In Fiscal 2020, the Company reported the highest net profit margin among Key Telecom Companies and Key IT/ICT Companies in India, with a net profit margin of 12.50% while its net profit margin was 8.48% in the six months ended September 30, 2020. It ranked first in terms of operating profit margin among the Key IT/ICT Companies in India in Fiscal 2020. Its profit before tax was Rs. 1,596.11 million, Rs. 2,176.89 million, Rs. 1,847.60 million and Rs. 621.84 million in Fiscal 2018, 2019 and 2020 and in the six months ended September 30, 2020, respectively.

Professionally managed with strong corporate governance and senior management team with significant industry experience: RCIL has a diversified Board and senior management team with significant industry experience. In compliance with the directives of the Department of Public Enterprises ("DPE"), RCIL regularly provides reports to Ministry of Railways and the DPE on a quarterly and annual basis. The industry experience of its management team and ability to deliver consistent growth is key strength of RCIL. It has achieved a measure of success in attracting an experienced senior management team with operational and technical capabilities, management skills, business development experience and financial management skills.

Business Strategy:

Continue to expand telecom services and deploy latest technologies*:* RCIL's extensive network is a key differentiator in the market and a key value proposition in delivering services to its customers. To build 5G infrastructure in India, fiberisation of telecom towers is a pre-requisite. It, therefore, intends to create open radio access networks, small cell and tower infrastructure at railways stations to for hosting telecom players to assist with their preparation for the 5G network, plans to continue to invest in expanding its network and deploying

latest technologies to enable a high capacity next generation network in order to deliver sustained value to its customers and improve their experience with its services. It intends to create neutral telecom infrastructure to allow it to host telecom players at railway stations in India. It also intends to work with banks and financial institutions to create an integrated network and build capabilities of managing NOC operations of such institutions. It has invested significantly in Wi-Fi with its station Wi-Fi network spread across 5,929 railway stations and it is exploring various models for monetization of station Wi-Fi. The station Wi-Fi network is being used for monetization from the Content on Demand project. As of January 31, 2021, it has empaneled over 180 partners / business associates with a range of skill sets covering various ICT opportunities. In addition, as part of 'Digital Service Partner' program, RCIL has created a platform for small agile ICT companies that provide unique solutions that are required for implementing various Digital India initiatives. It intends to collaborate with such companies to provide unique solutions using artificial intelligence and machine learning.

Further diversify services and solutions with a focus on Indian Railways: Strong economic growth, aided by shift to digital and on-demand business models with a growing need for any time anywhere connectivity for enterprises and the GoI's push for digitization, are fueling demand for telecom services from enterprises. It intends to continue adopting the ready business solution approach enabling its customers to scale faster and enhance their operational efficiencies. It plans to enhance its focus on provision of services that have high market attractiveness and in particular work with the Indian Railways. The Indian Railways currently uses GSM-R based network and intends to migrate to the LTE network. It intends to work with the Indian Railways to develop and manage their proposed LTE network that will create a private network along a railway tracks. It also intends to work with the Indian Railways to meet current and emerging communication infrastructure requirements by implementing the High Speed Mobile Communications Corridor ("HSMCC").

RCIL is currently working on a LTE-based communication system for the Indian Railways which is similar to the public protection and disaster recovery ("PPDR") networks that employ LTE standards. It intends to offer its services to various governmental agencies that are proposing to modernize PPDR networks. In addition, it is also in process of executing projects such as HMIS, drone recording of Indian Railways and closed circuit camera live feed from projects collection and monitoring system, disaster recovery site for civil engineering projects at Indian Railways Institute of Civil Engineering, Pune, implementation of signaling management system for Northern Railway, direct IP peering between Railnet and Railway Internet Data Center, New Delhi, railway depot management system, asset management system, a 360 degree comprehensive asset management of all assets of the Indian Railways and integrated security checking and management system at stations and trains for Indian Railways.

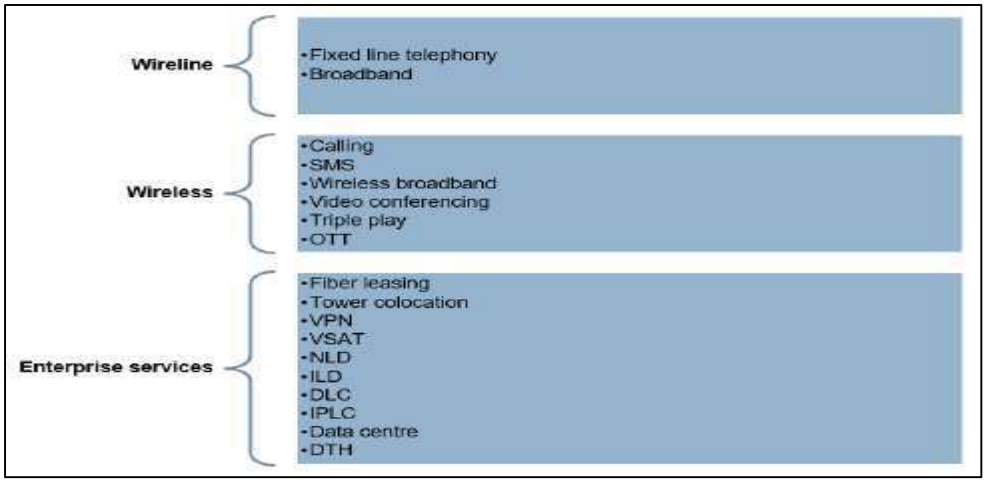
Expand services outside India*:* Given RCIL's expertise in handling a range of ICT infrastructure projects and its ability to provide diversified service and solutions, it intends to offer its services selectively in jurisdictions outside India. It is currently in the process of bidding for project in Africa that include supply, delivery, installation, testing and commissioning of goods and service for digital literacy in public primary schools in Kenya. The Company will look to leverage its expertise of working and developing projects for the Indian Railways, particularly modernizing and digitizing the existing networks, to other projects in Bangladesh where it is currently evaluating projects. In addition, it is exploring business opportunities in Mauritius and in particular in the healthcare segment. It intends to become a platform for regulators and fintech providers and implement these applications in other developing countries. It also intends to leverage it's existing technology and work with the GoI to implement its capabilities in other countries.

Industry

Overview Of The Telecom Services Industry In India

Structure of the telecom and telecom data services industry in India

The Indian telecom services industry can be broadly segregated into wireless, wireline and enterprise services. Wireline services are traditional landline calling services and wired broadband service. Wireless service includes mobile calling, short messaging service ("SMS"), wireless broadband, video conferencing service, triple play service, and over-the-top ("OTT") platforms. Enterprise services provide network connectivity across locations and users in an organization.



Enterprise services

Fiber leasing

Typically, dedicated fiber leased lines fulfil two common purposes: (i) they provide corporate offices with high capacity connection to the internet, and (ii) they connect the local network of several corporate offices to form a wide area- network. In this case, individual subscribers could be organizations using fiber for business purposes. Leased fiber line provides various benefits, including faster connection speeds, connection reliability, stronger signal, low latency (time taken for data transmission) and symmetrical speed (in terms of equal download and upload speeds). Bharti Airtel Limited, Bharat Sanchar Nigam Limited ("BSNL"), RailTel Corporation of India Limited ("RailTel"), Tata Communications Limited, and Vodafone Idea Limited are the major players providing such services in India.

Tower co-location

This is a service provided by an infrastructure provider ("IP") companies who lease out their existing base transceiver stations ("BTS") and RF/IP antennas to wireless communication providers for data and voice transmission. IP companies receive rent from wireless telecom companies that do not have funds or do not want to undertake significant capital expenditure to set up their own BTS network. Co-location involves mounting of nodes on existing tower infrastructure to receive and transmit data and voice packets wirelessly. Bharti Infratel Limited, Bharti Airtel Limited, GTL Infrastructure Limited, Indus Towers Limited, Reliance Jio Infocomm Limited, RailTel and Vodafone Idea Limited are the main players providing tower co-location services in India. Tower co-location has become an important source of revenue for these companies with the rise in spectrum allocation, enhancing the need for more BTS units to be installed.

Virtual Private Network ("VPN")

A VPN uses public telecommunication infrastructure, such as the internet, to securely connect remote sites/ users to the organisation's network. These services cost less than alternatives, such as, traditional leased lines or remote access servers. VPN technology is based on the tunnelling concept, which involves establishing and maintaining a logical network connection. In such a type of connection, packets constructed in a specific VPN protocol format are encapsulated within another base or carrier protocol, and then are transmitted between the VPN client and server, and finally de-encapsulated on the receiving end.

Multi-Protocol Label Switching ("MPLS")

To provide traffic isolation and differentiation without substantial overheads, MPLS is among the commonly used methods to create VPNs. MPLS involves setting up a specific path for a given sequence of data packets, each identified by a label, which reduces the time for a router to look up the address of the node where the data packet is forwarded. Besides increasing the speed of the internet traffic, MPLS makes it easy for a service provider to monitor the quality of service ("QoS"). MPLS-VPN technology allows service providers complete control over parameters that are critical to offering customers service guarantees with regard to bandwidth throughputs, latencies and availability. It reduces network complexity and cost for the customer, and eliminates the need for an in-house technical workforce. Rather than setting up and managing individual point-to-point circuits between each office using a pair of leased lines, MPLSVPN customers need to provide only one connection from their office router to a service provider.

Very Small Aperture Terminal ("VSAT")

VSAT refers to a small fixed earth station, which provides the vital communication link required to set up a satellite based communication network. It refers to receiving/ transmit terminals installed at dispersed sites connecting to a central hub through satellite using small diameter antenna dishes, ranging approximately between 0.6 metres and 3.8 metres. Generally, these systems operate in the Ku-band, which is used primarily in Europe and North America, and C-band, used extensively in Asia, Africa and Latin America, frequencies.

There are typically five types of VSAT networks: (i) multipoint (provides for two-way data, voice and multimedia operations); (ii) full-meshed (provides interconnection of dissimilar communication devices); (iii) hybrid (between multipoint and full-meshed); (iv) single channel per carrier (point-to-point circuits for-two-way communication between VSAT terminals located at two sites); and (v) broadcast (for the transmission of data, video and audio files to any number of users). VSAT comprises two modules: (i) an outdoor unit; and (ii) an indoor unit. The outdoor unit is generally ground or even wall-mounted, and the indoor unit, which is the size of a desktop computer, is normally located near the computer equipment. Indian VSAT players are classified as commercial and government/ defence users. The companies that are active in the VSAT segment in India include Bharti Airtel Limited, Bharat Sanchar Nigam Limited, HCL Comnet Limited, Hughes Communications India Limited, Infotel Satcom Private Limited, Planetcast Media Services Limited and Tatanet Services Limited.

National long distance ("NLD")

NLD service refers to carriage of switched-bearer telecommunication services over a long-distance network, *i.e.* a network connecting different short distance charging areas or SDCAs. Such a service provider is usually a telecom operator providing the required digital capacity to carry long distance telecommunication services within the scope of their license, which may include various tele-services, such as, voice, data, fax, text, video and multimedia. The major players in the NLD space in India are BSNL, Bharti Airtel Limited, Mahanagar Telephone Nigam Limited, Power Grid Corporation of India Limited, RailTel, Tata Communications Limited, Reliance Jio Infocomm Limited and Vodafone Idea Limited.

International long distance ("ILD")

ILD service is defined as a network carriage service, providing NLD operators with international connectivity by connecting to network facilities operated by foreign carriers in other countries. It involves setting up of undersea fiber cables to transmit voice and data globally as radio wave transmission through towers is not possible over such a long distance. ILD service provides most of the services provided by a NLD licensee, however, ILD service provides such services internationally. The major players operating with ILD license in India are AT&T Global Network Services India, Bharti Airtel Limited, BSNL, Reliance Jio Infocomm Limited, Sprint Telecom India Limited, Tata Communications Limited, Verizon Communications India Limited, and Vodafone Idea Limited.

Domestic leased circuits ("DLC")

DLC refers to a leased circuit that is connected to a subscriber's premises within India. The telecom service providers provide DLCs to connect two or more customer sites or customers to their own or other service provider's network. A DLC can carry data, voice, fax, video or any other form of digital transmission at bandwidths from 64 kilobits per second ("kbps") to 1,000 megabits per second ("mbps"). The major players currently operating in the DLC business in India include Bharti Airtel Limited, BSNL, RailTel, Tata Communications Limited and Vodafone Idea Limited.

Tower co-location

This is a service provided by an infrastructure provider ("IP") companies who lease out their existing base transceiver stations ("BTS") and RF/IP antennas to wireless communication providers for data and voice transmission. IP companies receive rent from wireless telecom companies that do not have funds or do not want to undertake significant capital expenditure to set up their own BTS network. Co-location involves mounting of nodes on existing tower infrastructure to receive and transmit data and voice packets wirelessly. Bharti Infratel Limited, Bharti Airtel Limited, GTL Infrastructure Limited, Indus Towers Limited, Reliance Jio Infocomm Limited, RailTel and Vodafone Idea Limited are the main players providing tower co-location services in India. Tower co-location has become an important source of revenue for these companies with the rise in spectrum allocation, enhancing the need for more BTS units to be installed.

Recent trends in telecom and telecom data services industry in India

Covid-19 to have minimal impact on telecom companies

The impact of the Covid-19 pandemic is likely to be minimal on telecom companies. A large part of the impact on subscriber additions will be on account of short-term supply chain disruption in smartphone availability. Telecom companies are also likely to see a rise in cost of network equipment, much of which is imported, thus affecting their operating margin. However, with increasing number of people working from home, data volume is likely to jump in the short term, leading to subscribers recharging with higher data tariff packs. This will likely offset any loss resulting from slow subscriber additions.

AGR dues - A huge roadblock for telecom companies

Telecom services companies pay licence fees and spectrum usage charges at 8% and 3% to 5% of the adjusted gross revenue ("AGR"), respectively. As defined by the Department of Telecommunications ("DoT"), AGR includes telecom service revenue, i.e., core revenue, as well as non-core revenue. However, the Cellular Operators' Association of India ("COAI") challenged this definition in 2005 in the Telecom Disputes Settlement and Appellate Tribunal ("TDSAT"), arguing that the AGR should include only revenue from core licenced telecom services. Over the years, telecom companies continued to pay licence fees and spectrum usage charges as per their formula, i.e., as a percentage of only core revenue, without making adequate provisions in the form of contingent liabilities as an outside balance sheet item, in case of an adverse judgement.

The Supreme Court has now withheld the TDSAT's 2015 ruling, in effect, upholding DoT's definition. With this, telecom companies, particularly incumbents like Bharti Airtel, Vodafone-Idea, as well as BSNL, will have to pay out more than Rs. 750 billion. This would further undermine their already weak financials. Although the original outstanding due for the entire industry is Rs. 200 billion to Rs. 250 billion, accumulation of this amount over the past 14 years, along with penalty and compounding monthly interest, has led to the build-up of an outstanding of approximately Rs. 1.3 trillion.

The DoT had filed a petition in Supreme Court to allow self-assessment of AGR dues by players, and to grant them 20 years to pay the amount. However, the Supreme Court on March 18, 2020 criticised the self-assessment request and directed the industry to stick to the DoT calculated dues. At the first hearing on June 11, 2020, the Supreme Court directed telecom companies to file affidavits regarding securities and bank guarantees that can be furnished for the deferred payment. The telecom companies, however, conveyed their inability to furnish further guarantees owing to their poor financial health. Thus, during the second hearing on June 18, 2020, the Supreme Court directed the DoT to study telecom companies' proposals regarding payments and timelines. Further, the Supreme Court on September 1, 2020, allowed telecom companies 10 years' time to pay their AGR dues to the Government stating that the period of 20 years fixed for payment was excessive. In a series of directions to the telcom companies, the Supreme Court stated that they shall raise no dispute nor will they be any reassessment of the AGR dues. The telecom operators would make the payment of 10% of the total dues as demanded by DoT by March 31, 2021. The yearly instalments would commence from April 1, 2021 up to March 31, 2031. The instalments would be paid by March 31 every year.

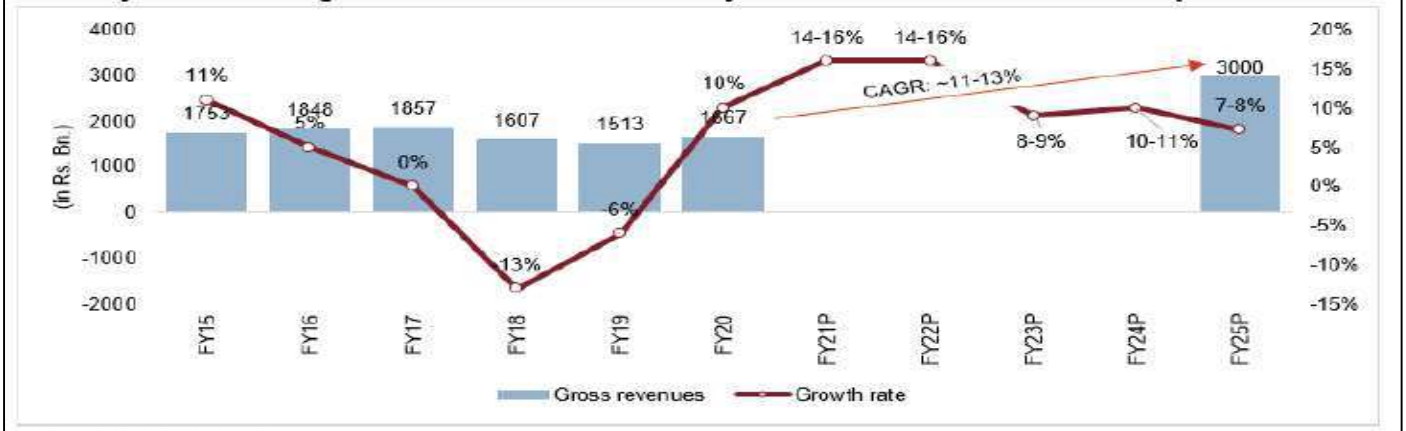
Relief for non-UASL license holder telecom Public Sector Undertakings ("PSU")

In June 2020, the DoT informed the Supreme Court that it had withdrawn 96% of its Rs. 4,000 billion demand in AGR from non- UASL license holder PSUs as their core operation was not to provide basic telephony services including cellular mobile covered under the UASL.

Market sizing of telecom services in India

Rising Average Revenue Per User ("ARPU") to aid industry revenue recovery in Fiscal 2021 The Indian telecom industry has undergone significant disruption over the past two years, owing to aggressive pricing strategies of new entrants. The smaller players, who could not compete, merged with larger players, who managed to stay afloat. As the number of players has reduced from eight to four over the past two years, the industry is seeing early signs of recovery, especially in the last two quarters of Fiscal 2019. CRISIL Research expects revenue to improve in the next two fiscals, driven by increase in ARPU, owing to tariff hikes. To be sure, the Indian telecom industry has seen some pricing discipline over the past one year, with schemes such as minimum recharge plans and charging for off-net calls, and also tariff hikes. After experiencing pricing stability in the last two quarters of Fiscal 2019, players marginally increased prices beginning first quarter of Fiscal 2020. Following the Supreme Court order on AGR in December 2019, players further increased tariffs on various popular packs by 30% to 40%. Hence, post a 6% on-year decline in gross revenue in Fiscal 2019, CRISIL Research estimates the industry's gross revenue to have recovered 9% to 10% on-year in Fiscal 2020, to approximately Rs. 1,670 billion, led by growth in ARPU, owing to price hikes in the last quarter of the Fiscal 2020. As the full impact of the rise in ARPU will be seen this fiscal, it is expected that gross revenue will rise 14% to 16% on-year in Fiscal 2021. Extension of validity vouchers amid the COVID-19 pandemic and removal of interconnect usage charge ("IUC") in the last quarter of Fiscal 2021, though, will partially offset the ARPU increase. Players are likely to again raise tariff in the latter half of Fiscal 2021, if not before. This will make Fiscal 2022 another year of strong revenue growth. It is expected the industry will cross the Rs. 3,000 billion mark by Fiscal 2025 in the back drop of rising ARPU because of the tariff hikes, strong 4G additions, and increase in data usage.

Recovery in ARPU owing to tariff hikes to revive industry revenue in the current and subsequent fiscals



E: Estimated; P: Projected

Note: The bars represent gross revenue as reported by the Telecom Regulatory Authority of India (TRAI)

Source: TRAI, CRISIL Research

Lockdown and work from home due to Covid-19 to increase data usage

Monthly average data usage is estimated to reach 11 GB per subscriber per month in Fiscal 2020, owing to increased affordability of smartphone devices, increase in 4G penetration, and popularity of OTT apps. With work from home there has been an increase in demand for unified communications apps such as zoom, WebEx, Microsoft teams apart from, the already in demand, OTT apps such as WhatsApp, for messaging, and Skype, Viber, and Hike for voice and video calls. Over and above, increase in demand for online shopping has pushed usage for e-commerce apps is expected to further push data usage in Fiscal 2021. In Fiscal 2021, CRISIL Research expects a further jump in data usage to 15 GB per month as persistent lockdowns will result in people staying at home, and, thereby, increasing their data usage. However, over Fiscal 2020 to Fiscal 2024, it is expected that growth in average data usage to moderate over a high base. CRISIL Research expects average monthly data usage per subscriber per month to register a CAGR of approximate 20% between Fiscal 2019 to Fiscal 2024, to reach approximately 21 GB. This expected increase in data usage thus offers a huge opportunity for the telecom service providers, such as Bharti Airtel ltd., Vodafone Idea ltd., Reliance Jio Infocomm ltd., MTNL, BSNL, Tata Communications, RailTel, Sify Technologies and others, to offer and strengthen existing network capabilities of customers.

ISP market size

Internet subscriber base to reach approximately 909 million by March 2025

India's internet subscriber base (wireless and wired) is estimated to have reached approximately 690 million at the end of Fiscal 2020, according to the Telecom Regulatory Authority of India ("TRAI"). It is further expected the base will expand at a CAGR of approximately 5% to 7% between Fiscal 2020 and Fiscal 2025. This will result into approximately 909 million Indian subscribers online by Fiscal 2025. Within

wireless, the aggressive growth of 4G subscribers is expected to offset the decline in 3G and 2G numbers. Rising adoption of high-speed wireless broadband will be due to:

- Lower mobile data tariffs;
- Proliferation of low-cost data handsets (smartphones as well as feature phones);
- Rise in network coverage of high-speed data services owing to increased investments by telecom companies and surplus capacity;
- Growing preference among users for on-the-move internet access;
- Availability of customised content on various OTT apps; and
- Government initiatives under Digital India.

The number of wired broadband subscribers are expected to grow at an equal pace vis-à-vis wireless broadband, because of increasing competitive intensity, work from home requirements due to the COVID-19 pandemic, and tariff hikes in wireless services. In addition, the National Digital Communications Policy 2018 entails fixed line broadband services to 50% of the households and providing universal broadband connectivity at 50 mbps to every citizen in India by 2022, thereby driving growth. The passive growth in wired internet demand in the past was on account of services being concentrated in large cities and major urban areas. Additionally, 4G mobile broadband prices have been much lower than those of wired broadband. Hence, most of the internet consumption has taken place via mobile phones and mobile hotspots. The aggressive competitive intensity in the wireless space also resulted in lower focus of telecom companies on the wired broadband market.

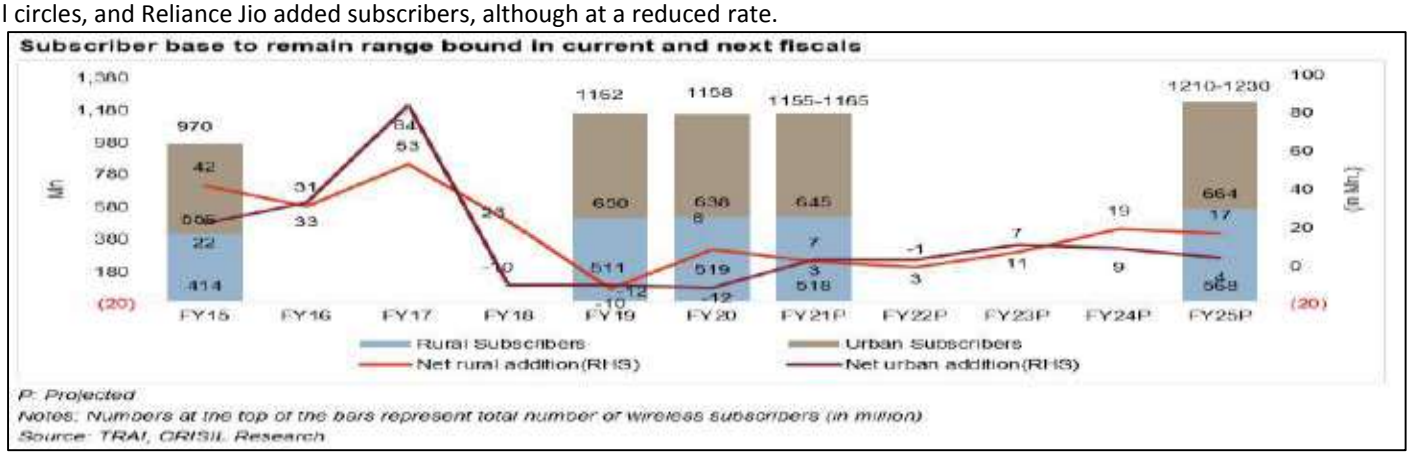
Most narrowband subscribers to migrate to broadband

It is forecasted that narrowband internet access will continue declining over the next five years. As data demand and file sizes increase, better internet speeds will be required, hence narrowband subscribers are increasingly expected to migrate to broadband connections, which offer higher speeds and lower price points. Therefore, it is expected that the wireless narrowband subscriber base will fall to approximately two million by Fiscal 2025 from approximately 52 million in Fiscal 2020. On the other hand, the wireless broadband subscriber base is expected to increase to approximately 876 million by Fiscal 2025 from approximately 670 million in Fiscal 2020, dominated by 4G wireless data subscribers.

Overview of wireless and internet wireline subscribers in India

Pandemic to limit wireless subscriber additions

The wireless subscriber base in India was approximately 1,158 million as of March 31, 2020. Analysis of monthly churn rate in different circles indicates that while Bharti Airtel has largely managed to stabilise its subscriber churn, Vodafone Idea continued to lose subscribers in all circles, and Reliance Jio added subscribers, although at a reduced rate.



P: Projected
Notes: Numbers at the top of the bars represent total number of wireless subscribers (in million)
Source: TRAI, CRISIL Research

In Fiscal 2021, it is expect that the subscriber base will be around 1,155 million to 1,165 million. It is expected that further additions will be limited owing to tariff hikes and lower access to retail outlets amid the lockdowns. Telecom tower revenue trends and forecast Consolidation, co-location exits to weigh down revenue growth Post the merger, Vodafone and Idea had announced that approximately 88,000 overlapping co-locations would be exited over a period of time. Till the first half of Fiscal 2020, the merged entity had exited from 54,000 sites. More sites expected to be removed in Fiscal 2021. This will lead to a decline in the rent revenue per tower, as upward revision of rentals for existing tenants would not completely offset the loss of rental from existing tenants. The rent revenue per tower declined approximately by 8% in Fiscal 2019. It is estimated that the rent revenue per tower declined by approximately 2% to 3% in Fiscal 2020 as some portion of this loss is expected to have dropped over to Fiscal 2020, while exit penalties are expected to partially offset the revenue loss. The rent revenue per tower is projected it to fall by approximately 3% to 5% in Fiscal 2021. Overall rent revenue of the telecom towers industry is expected to register a CAGR of approximately negative 1% to 3% between Fiscal 2019 and Fiscal 2024, in comparison a 3% CAGR between Fiscal 2014 and Fiscal 2019. The slowdown is expected to be led by lower volume expansion as a result of the change in the BTS mix along with new captive tower additions to the market. Growth drivers, such as, 4G network expansion to improve QoS are expected to be offset by the falling rent realisation per tenant.

Consolidation and co-location in telecom towers industry

Top three companies own more than half the telecom towers

Currently, Reliance Jio Infratel, Indus Towers, American Tower Corp, Bharti Infratel and GTL Infrastructure are the key players in the Indian telecom towers sector, accounting for approximately 65% share of India's approximately 5.9 lakh towers, as of January 2020. The merger of Indus Towers and Bharti Infratel is set to create the world's second largest mobile tower operator, with over 173,000 towers and approximately 30% tower market share in India. China's largest tower company, China Tower, had a tower count of approximately 1.95 million and is the largest tower player in the world. India's other players, Tower Vision and Ascend Telecom Infrastructure, have a comparatively small portfolio of approximately 15,000 towers collectively.

Telecom towers industry to consolidate further

With telecom service providers set to exit the tower business, the market is expected to consolidate further as major tower players look to add more towers to their respective portfolios to compete. Additionally, smaller players may find it difficult to survive, considering their lower bargaining power due to the lack of nationwide footprint and scale. Post consolidation, the market is expected to have only 3 to 4 large players, apart from telecom operators with a few captive towers.

Co-locations in the telecom towers industry

A co-location is defined as a site on a tower owned by the operator, which may or may not have multiple BTSs. Colocation is the total number of sharing operators at a tower. A loaded site implies that a single telecom operator has installed more than one BTS on a single tower. Telecom tower players offer discounts to telecom service providers to install multiple BTSs on the same tower. A loaded BTS commands a much lower rent (approximately 15% of the actual rent that a single tenant pays), and hence, impacts revenue of the tower company. Going forward, loaded sites are expected to account for a higher proportion of incremental tenancies. Industry information indicates that telecom companies are currently focusing on densification of 4G networks across circles. The 2G and 3G BTSs in these sites are expected to be replaced by 4G BTSs, which will not result in higher rentals.

Per tower metrics on a downward route

Going forward, capacity enhancement is expected entail operators loading existing sites with BTSs to improve the QoS and cater to the densification demand of 4G technology, which is expected to not result in incremental revenue for tower companies. Therefore, the rent per tenant is expected to follow the historical downward trend and decline by a CAGR of approximately 7% between Fiscal 2019 and Fiscal 2024. The rent revenue per tower declined significantly by 8% in Fiscal 2019 due to front-loaded exits of Vodafone-Idea tenancies and is expected have degrown by 2% to 3% on-year in Fiscal 2020. It is expected to continue to de-grow by a negative CAGR of 3% to 5% until Fiscal 2024 as new additional captive towers get added to the market.

Key opportunities and challenges in the telecom services industry

The telecom services and its allied business nurture upon opportunities such as low rural tele-density, infrastructure required for 5G launch, low cost-mobile handsets, growing demand for internet among emerging culture of work from- home and relaxation on FDI inflows to encourage investments in the sector.

Opportunities

Low rural tele-density to drive wireless subscriber base going ahead

The number of subscribers will increase at a CAGR of 1% to 2% over Fiscal 2020 to Fiscal 2025 once inactive subscribers get deactivated owing to multiple subscriber identification module (SIM) users opting out on account of minimum recharge and switching to primary SIM cards. Majority of the subscriber additions will be in underpenetrated rural areas with a rural tele-density of approximately 56.67% as of December 2019, giving operators scope to expand services in these areas.

Pre-requisite for launch of 5G services to boost fiber and satellite infrastructure

An important 5G ecosystem pre-requisite, essential to building use-cases, is optic fiber networks. India lags considerably with less than 30% fiberisation compared to over 70% in the US and China. India needs to lay another 1.0 million to 1.2 million fiber kilometers in order to be prepared for 5G.

Leasing of fiber can make India 5G-ready earlier

Fiberisation would require an investment of over Rs. 1 trillion. Approximately three-fourths of this cost will be to get right-of-way approvals, which can be as high as Rs. 10 million per km in metros. It is expected that it will take 3 to 4 years for telecom companies to reach the required fiberisation levels, given the delays in in getting right-of-way and other permissions. As for devices, 5G-enabled ones are expected to make an entry in Fiscal 2021 in India, however affordable versions may take another 3 to 4 years. However, leasing of fiber can significantly reduce the investments required, depending upon sharing modalities, and will also make India 5G-ready earlier.

Internet of Things to disclose newer revenue streams for telecom companies going ahead

With the number of connected devices increasing, the Internet of Things will disclose newer revenue streams for telecom companies across domains such as healthcare, education and transportation. Hence, there are growth opportunities for telecom companies, however, it is expected that it will take a couple of years to materialize.

Right of way to rationalise administrative expenses

The Right Way Rules introduced in November 2016 are considered as a key enabler for expediting the deployment of underground (optical fiber) and over ground (mobile towers) infrastructure in India. The rules aim at rationalizing administrative expenses across India to a maximum of Rs. 1,000 per kilometer for fiber, and a maximum of Rs. 10,000 per application for overhead towers.

Proliferation of low-cost mobile handsets

Proliferation of low cost mobile handsets is also expected to play an important role in the uptick of the telecom services industry in India. Given the increasing competition, companies are focusing on launching cheaper mobile devices, making them more affordable. With Reliance Jio launching low-priced 4G enabled handsets and other companies offering 4G enabled feature phones in the same range, the sales of 4G enabled phones is expected to drive up overall sales of feature phones. Affordability of smartphones has also increased significantly in recent years, with the entry of Chinese players, and Indian players offering variety of handsets at competitive rates. Handsets available across different price points would aid in increasing sales across different user segments such as value-for-money customers, high-end customers, and feature-sensitive customers.

Reduction in international termination charges ("ITC") is expected to benefit national players

In September 2017, TRAI reduced the ITC payable by an international long distance operator ("ILDO") to the access provider, on whose network the call terminates, from Rs. 0.30 per minute to Rs. 0.53 per minute. The regulator's decision to cut ITC is expected to reduce calls made through OTT apps. In addition, it is expected to limit the grey route (calls made through illegal voice over internet protocol). In the short term, telecom companies will be affected because of a decline in cash flow from the reduction in ITC. However, in the long run, the decline in growth due to reduced cash flow will be offset by an increase in the volume of incoming calls to India. The reduction in ITC is therefore likely to benefit national players.

FDI cap relaxation to drive investments in the sector

In 2016, the Government of India increased the FDI ceiling in the telecom sector from 74% to 100% through the Foreign Investment Promotion Board ("**FIPB**") and the government's consolidated FDI policy. The FDI policy circular retained the FDI cap of 100% in telecom services (including IP Category – I), of which, up to 49% investment can be done through the automatic route. Investments are expected to pick up in the sector as the government aims to see the commercial rollout of 5G services in the coming years.

Overview Of Telecom Data Services Industry In India

Comparison of fixed broadband subscribers with developed and developing economies

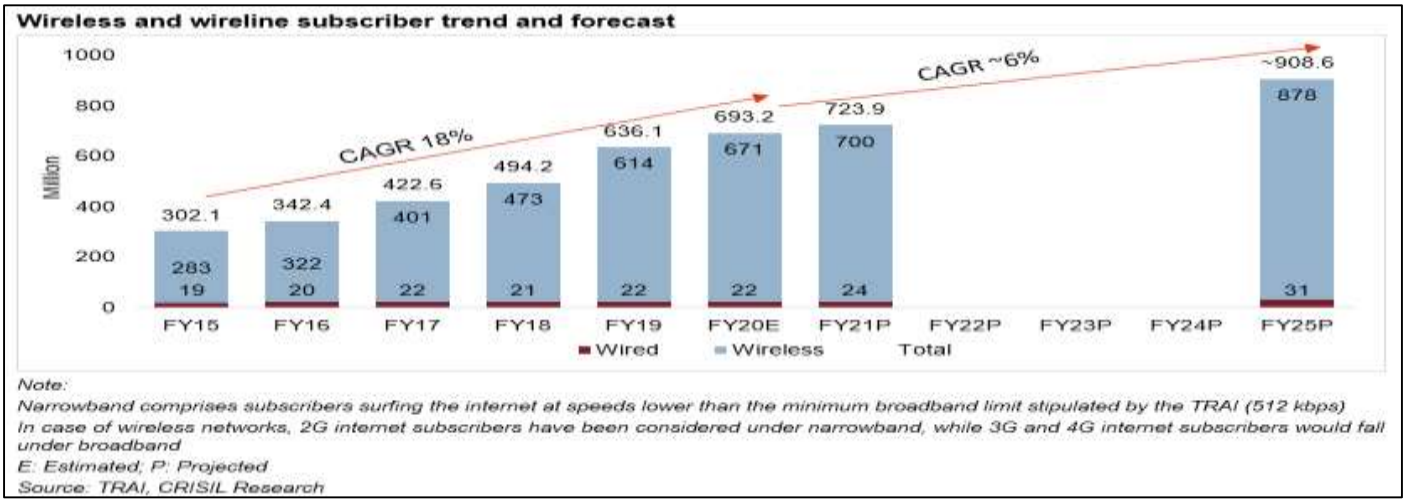
India has the lowest fixed broadband subscriptions per 100 people

Out of the countries compared above, India has the lowest fixed broadband subscriptions (per 100 people) as of December 2019, with 19.7 million fixed broadband subscribers even within developing countries. However, this provides for a significant opportunity for telecom players in India. In the medium term, majority of the subscriber additions are expected to be from the under-penetrated rural areas in India, supported by the Government's plans, such as, 'Digital India' and 'BharatNet'.

Overview of the total internet subscriber base of wireless and wireline services in India

Wireline broadband market to gain pace owing to the COVID-19 pandemic

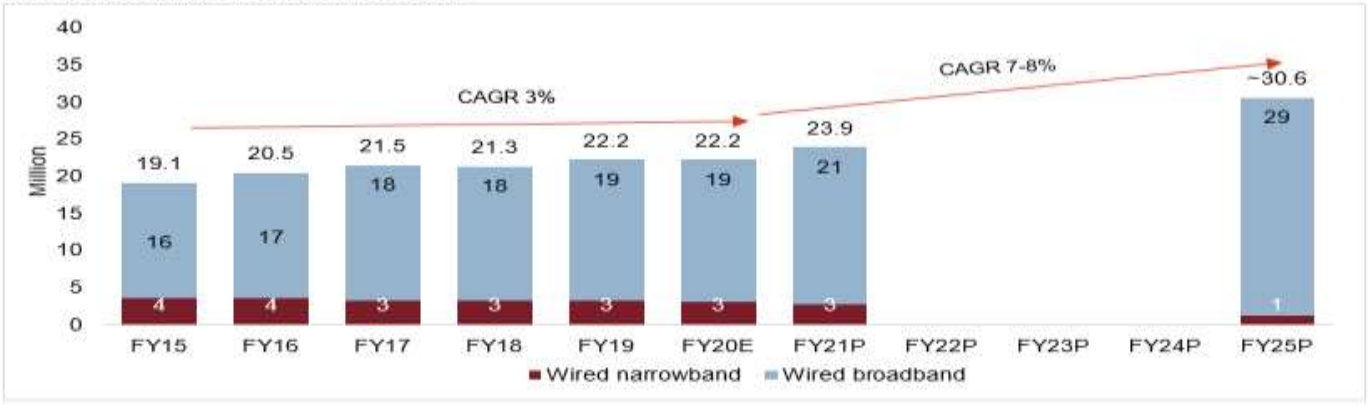
The wired broadband market has remained stagnant for last three fiscals. The entry of Reliance Jio with the launch of JioFiber was expected to intensify competition in the space. However, the response was tepid, resulting in no improvement in broadband penetration. Owing to the COVID-19 pandemic, it is expected that more urban subscribers will sign up for wired broadband subscriptions with the likelihood of prolonged work from home requirements



Note:
Narrowband comprises subscribers surfing the internet at speeds lower than the minimum broadband limit stipulated by the TRAI (512 kbps)
In case of wireless networks, 2G internet subscribers have been considered under narrowband, while 3G and 4G internet subscribers would fall under broadband
E: Estimated; P: Projected
Source: TRAI, CRISIL Research

Globally, work from home has become a new norm due to the COVID-19 pandemic. Additionally, the lockdown in India has resulted in people spending more time at home, leading to a rise in average data consumption by at least 20% in spite of major streaming apps reducing their resolution. Requests for wired broadband subscriptions have increased majorly in urban areas, as work from home requires a reliable and fast internet connection. Thus, the scenario is likely to provide the much-needed trigger for increase in wired broadband subscriptions, which have remained stagnant for the past three fiscals. CRISIL Research expects the wired internet subscriber base (narrowband and broadband) to increase to approximately 33 million by Fiscal 2025 from approximately 22 million in Fiscal 2020. Within the segment, it is expected that broadband internet will be the growth driver, with its share expanding to over 98% of the overall wired internet subscriber base in Fiscal 2025, from approximately 85% in Fiscal 2020. Wired broadband will comprise the bulk of the wired internet subscriber base because of the continued shift of retail subscribers to higher bandwidths, among the growing popularity of social networking and availability of video content. Also, the price difference between broadband and narrowband has reduced over the past few years. Renewed competition in the wired broadband segment with the entry of Reliance Jio is expected to spur growth over the next few years.

Wired subscriber trend and forecast



Note:
Narrowband comprises subscribers surfing the internet at speeds lower than the minimum broadband limit stipulated by the TRAI (512 kbps)
E: Estimated; P: Projected
Source: TRAI, CRISIL Research

Tariff hikes in wireless space may result in subscribers preferring wired broadband services

The December 2019 tariff hikes marked the end of price wars in wireless space that led to significant consolidation in the telecom market. The price wars resulted in drop dead wireless services and significantly improved the wireless internet penetration in India. However, the wired broadband market remained stagnant over the last three fiscals as the price per GB differential between wired and wireless services was significant, and the increasing affordability of smartphones ensured that wireless mode became the most preferred medium for data consumption. However, with the industry consolidated, the wireless players hiked their tariffs in December 2019 and signalled further tariff hikes over the next two fiscals. Simultaneously, they reduced wired broadband prices to increase penetration and are also expanding to rural areas. Thus, CRISIL Research estimates that further tariff hikes in mobile services are likely to make users opt for wired broadband, which also offers higher speeds and better reliability.

Wireless data subscribers growth to moderate over next five fiscals

With telecom companies expanding 4G services in rural areas in a focussed and aggressive manner, their subscriber base has grown rapidly in the recent times. While urban growth is expected to diminish, rural areas, where penetration remains low, are likely to drive overall growth. Wireless internet demand is expected to grow at a CAGR of 7% to 10% between Fiscal 2019 and Fiscal 2024 to reach approximately 850 million, driven by a growth in the number of 4G subscribers, better speeds, cheaper 4G handsets, and low penetration of wireline infrastructure in rural areas. However, the growth rate will be offset by further tariff hikes by wireless players over the next two fiscals.

Trends and revenue forecast in Enterprise Data Services ("EDS")

Adoption of EDS is projected to rise at a nominal pace over the next five years. Industry growth will be volume led, primarily owing to a continuous decline in bandwidth prices. Realisation, though, is expected to fall, thereby limiting growth. Among the broad segments within EDS, the VPN is expected to show robust growth, owing to cost advantage, flexibility and scalability.

VPN share to rise at a fast clip

CRISIL Research projects revenue of the EDS industry to register a CAGR of 4% to 5% over the next five years, to reach approximately Rs. 175 billion in Fiscal 2025. Among the segments, VPN is likely to grow faster especially after the pandemic as VPN forms a very critical element of corporates business continuity plans. VSATs are also expected to see faster growth owing to newer revenue opportunities like

in-flight connectivity services. Most of the growth will be prominently volume driven, as prices of the services have been on a downward trend owing to the availability of substitutes and intensifying competition.

Sector and product-wise usage of EDS

BFSI, manufacturing, IT sectors among largest EDS end-users

Banking, financial services and insurance (BFSI), manufacturing, government, IT and ITeS are the largest users of EDS. While ITeS accounts for the largest share of IPLCs, the BFSI and manufacturing segments are major users of VPN/ ethernet services. The BFSI (primarily ATMs) and government sectors account for a majority of the demand for VSATs. While the larger segments will continue to drive demand for EDS, sectors such as education, retail, healthcare, travel and hospitality will provide a further impetus to market growth. Demand for EDS is also expected to grow as connectivity spreads across semi-urban and rural areas where there is a greater need to connect business arms / branch offices of large organizations. The VSAT industry is expected to receive a boost with TRAI permitting in-flight entertainment services. This will open a new revenue segment for the VSAT market and remains a key monitor over the next five years.

Other potential industry segments

Data center services

Data center services store data and provide support to companies by offering extensive IT infrastructure, including servers, firewalls, storage systems and various other IT components, in a different place. Data center services can be further classified into two types, the captive model (where data centers are built to manage a company's own operations) and the co-location model (where data centers are built to provide services to third parties, based on their requirements). In the co-location model, further classification can be based on the responsibilities of operational and technological risk taken by the developer/tenant.

Significant opportunity for data centers among the COVID-19 pandemic

With the rising demand for EDS owing to work from home, OTT apps and the expected rise in digitalisation across sectors, demand for data centres is expected to grow manifold. The increasing penetration of internet will also prove as a catalyst to the data centre industry.

Optic fiber network

Optical fiber network uses light pulses for data transmission by using the application of total internal reflection of light. Optical fiber can be classified on the basis of material used, mode of propagation and refractive index. For data transmission, optical fiber network remains the most preferred medium with as it is cost effective when compared with other mediums. Going forward, optical fiber network will play a key role in the Indian telecom industry. To build 5G infrastructure in India, fiberisation of telecom towers is a pre-requisite. India needs to invest over Rs.1 trillion in laying another 1.0-1.2 million fiber km in order to be 5G ready.

Bharat Net project to increase optic fibre network demand

The extent of fibre optics used in India is currently under development in urban cities, and is low as compared to the usage of other technologies. However, demand for this technology is expected to increase in future with the launch of the BharatNet Project (earlier National Optical Fiber Network ("NOFN") project, launched in 2012). 'BharatNet' is being implemented to provide broadband connectivity to all gram anchayats (approximately 2.5 lakh) in India. Under the project, network infrastructure is being established for 'broadband highways' accessible on a non-discriminatory basis, to provide affordable broadband services to citizens and institutions in rural areas, in partnership with states and the private sector. The project is being implemented in phased manner.

Video conferencing

Video conferencing apps provide virtual meeting experiences. The meetings/conferences can be held on laptops, desktops, smart phones or tablets. The apps generally allow sharing of programmes such as presentations or other materials for collaborative viewing experience. The functions include recording and even live streaming across geographies. Video conferencing apps have gained good ground, especially during the COVID-19 pandemic. The increase in work-from-home models, e-learning arrangements and webinars have pushed up demand for video conferencing apps.

Triple play services

Triple play services offer data, calling and internet protocol television (IPTV) services bundled together under a single plan using fiber to the home (FTTH) services. Triple play services are mainly offered by telecom operators or cable television operators. A major advantage of the triple play services is wireline connectivity which delivers better quality service than wireless. A few regional players such as DigitalFiber and TriplePlay, offer triple play services by entering into tie-ups with other telecom operators. Bharti Airtel started its triple play services in 2009 while BSNL recently announced triple play services by partnering with local cable television operators in Andhra Pradesh. However, the recent commercial launch of JioFiber by Reliance Jio will change the industry triple pay service landscape.

JioFiber entry into triple play services business to be observed

JioFiber may check the growth of wired broadband subscribers of other private players. Airtel has reduced its broadband pricing over the past few quarters to stay competitive and retain subscribers. The recent reductions in pricing of JioFiber have triggered a price war in the

triple play services space. Given the high EBITDA margin of the wireline broadband business (45% to 50%), telecom companies would have greater flexibility to opt for price reductions. The recent aggressive pricing in this segment by JioFiber might result in significant subscriber additions in the future.

Key Concerns:

- The telecommunications industry in India is highly regulated and changes in laws, regulations or governmental policy could potentially adversely affect the business, prospects, financial condition, cash flows and results of operations.
- Dependent on and derive a substantial portion of revenue from PSU customers, the Indian Railways and other GoI entities as well as State Governments and its relationship with GoI entities and State Governments exposes RCIL to risks inherent in doing business with them, which may adversely affect the business, results of operations and financial condition.
- If RCIL does not continue to provide telecommunications or related services that are technologically up to date, it may not remain competitive, and its business, prospects and results of operations may be adversely affected.
- RCIL is involved in certain legal proceedings, any adverse developments related to which could materially and adversely affect the business, reputation and cash flows.
- If RCIL cannot scale its business or manages its businesses effectively or are unable to successfully implement strategies, the quality of its services and results of operations could be adversely affected.
- Internet security concerns and illegal distribution by third-parties could adversely affect the broadband. internet access services.
- Depend on the continued service of employees, and RCIL's business and growth prospects may be disrupted if it lose its employees' services or if employee costs increase.
- Requires significant amounts of capital to finance its business expansion, which may require RCIL to incur significant capital expenditure, and operating and financing costs.
- The loss of key suppliers or their failure to deliver equipment or perform services in a timely or satisfactory manner could adversely affect the Company.
- Ability to further expand the coverage of network or to maintain the coverage of existing network may be limited by RCIL's ability to obtain or renew access rights on land or buildings owned by third-parties.
- Generates certain portion of its revenue from providing data services and a failure to successfully compete in providing data services could have an adverse effect on the business, financial condition, results of operations and prospects.
- The economic environment, increased pricing pressure and decreased utilization rates could negatively impact RCIL's revenues and operating results.
- The continuity of RCIL's services is highly dependent on the proper functioning of its network and infrastructure, and any disruption to its services or damage to its network infrastructure or failure of network could materially and adversely affect the business.
- Data center business could be harmed by prolonged power outages or shortages, increased costs of energy or general lack of availability of electrical resources.
- Business may not be compatible with delivery methods of bandwidth / connectivity developed in the future.
- If RCIL is unable to meet its service level commitments, its reputation and results of operation could suffer.
- Any delay in the collection of dues and receivables from customers may have a material and adverse effect on RCIL's results of operations and cash flows.
- The confidential information or data of RCIL's customers may be misappropriated by its employees and as a result, cause it to breach its contractual obligations in relation to such confidential information.
- Reputation and business may be harmed and RCIL may be subject to legal claims if there is loss, disclosure or misappropriation of or access to its subscribers' or its own information or other breaches of its information security.

- Failure to complete development, testing and introduction of new services, including managed services, could affect RCIL's ability to compete in the industry.
- RCIL may not meet the selection criteria set for high value contracts by the Government.
- RCIL may be subject to legal proceedings and claims regarding information disseminated over or the use of data from its network or through its services, which could increase the costs or require it to discontinue certain services.
- RCIL's business, financial condition and results of operations may be materially adversely affected by global health epidemics, including the recent COVID-19 outbreak, and the continuing effect of the same cannot be predicted.
- Increased sharing of existing and new passive telecommunication infrastructure may adversely affect RCIL.
- Any deficiency in billing and credit control and customer management processes could materially and adversely affect RCIL's operations.
- Compliance with subscriber verification norms, know your client ("KYC") regulations and data privacy norms may require RCIL to incur expenditure, which may adversely impact the financial condition and cash flows.
- Any asset impairment could adversely affect the financial condition and results of operations.
- Business relies on intellectual property, including intellectual property owned by third-parties, and it may inadvertently infringe the patents and proprietary rights of others.
- Depend on subscriptions for wired broadband internet services operations, 'Rail Wire', and RCIL's inability to renew existing customers' subscriptions and acquire new subscribers could have an adverse effect on its business.
- RCIL may be unable to replace lost revenue due to customer cancellations, renewals at lower rates or other less favorable terms.
- Telecommunications carriers that RCIL do business with, could suffer from decreasing margins and financial distress, which may negatively impact the business.
- RCIL is wholly-owned and controlled by the GoI, which makes it susceptible to changes to its policies.
- Failure to offer customer support in a timely and effective manner may adversely affect the relationships with customers.
- A significant change in the Government of India's economic liberalization and deregulation policies could adversely affect RCIL's business and the price of the Equity Shares.
- Any adverse change in India's credit rating by an international rating agency could materially adversely affect RCIL's business and profitability.
- If there is any change in tax laws or regulations, or their interpretation, such changes may significantly affect RCIL's financial statements for the current and future years.
- Fluctuation in the exchange rate between the Indian Rupee and foreign currencies may have an adverse effect on the value of Equity Shares, independent of its operating results.

Profit & Loss

Particulars (Rs in million)	H1FY21	FY20	FY19	FY18
Income				
Revenue from operations	5,374.0	11,280.5	10,032.7	9,767.8
Finance Income	7.6	-0.4	-2.0	15.4
Total revenue from operations	**5,381.6**	**11,280.1**	**10,030.7**	**9,783.1**
Other income	156.2	379.9	352.0	429.0
Total income	**5,537.8**	**11,660.1**	**10,382.7**	**10,212.2**
Expenses				

Access and other Charges	1,490.6	2,490.3	2,635.2	2,500.9
License fee and spectrum charges	263.5	479.3	459.9	473.4
Expenses on Project	1,107.6	3,400.8	2,494.1	2,533.2
Employee Benefits Expenses	668.9	1,205.3	1,120.2	1,179.9
Administrative & Other Expenses	503.8	314.8	271.4	431.6
Corporate Social Responsibility	39.1	51.9	30.3	7.6
Depreciation and amortisation	817.4	1,309.0	1,115.8	1,186.3
Finance Expenses	25.1	68.0	78.9	38.1
Total expenses	**4,916.0**	**9,319.5**	**8,205.8**	**8,351.0**
Profit/ (Loss) before exceptional items and tax	**621.8**	**2,340.6**	**2,176.9**	**1,861.2**
Exceptional Items	**0.0**	**-493.0**	**0.0**	**-265.1**
Profit before Tax	**621.8**	**1,847.6**	**2,176.9**	**1,596.1**
Tax expense				
Current tax	283.8	559.8	580.7	794.3
Deferred tax	-117.8	-134.0	209.6	-236.0
Tax impact of earlier years	0.0	11.2	33.0	-302.3
Total Tax Expenses	**166.0**	**436.9**	**823.3**	**256.1**
PAT	**455.8**	**1,410.7**	**1,353.6**	**1,340.1**
EPS	1.4	4.4	4.2	4.2
Equity	3209.4	3209.4	3209.4	3209.4
FV	10	10	10	10
PATM (%)	8.5	12.5	13.5	13.7

(Source:RHP)

Balance Sheet

Particulars (Rs in Million)	H1FY21	FY20	FY19	FY18
Assets				
NON CURRENT ASSETS				
Property, Plant and Equipment's	5817.1	6085.3	7859.8	6843.5
Capital Work-in-Progress	2315.3	2525.5	2999.0	3641.6
Right of Use Assets	1675.1	1729.6	0.0	0.0
Intangible Assets	147.0	78.4	39.6	36.4
Financial Assets				
Loans and Security Deposits	41.4	33.2	34.7	37.7
Other Non Current Financial Assets	826.9	2193.0	6.5	0.0
Deferred tax assets (net)	82.5	0.0	0.0	40.1
Other Non Current Assets	29.1	180.6	310.0	988.6
TOTAL NON CURRENT ASSETS	**10934.4**	**12825.6**	**11249.5**	**11588.0**
CURRENT ASSETS				
Inventories	1.5	4.9	8.7	0.0
Financial Assets				
Investment	0.0	0.0	70.5	0.0
Trade Receivables	6565.2	5070.7	4595.7	4666.8
Cash and Cash Equivalents	744.7	1345.2	716.3	728.3
Other Bank Balances	2944.7	1339.1	3353.0	4363.9
Loans and Security Deposits	53.7	48.7	43.2	25.2
Other Current Financial Assets	2169.4	2135.4	1178.8	1121.8
Current Tax Assets (Net)	366.1	274.8	327.3	220.9
Other Current Assets	1041.8	936.7	733.8	513.8
TOTAL CURRENT ASSETS	**13887.1**	**11155.4**	**11027.2**	**11640.8**
TOTAL ASSETS	**24821.5**	**23981.0**	**22276.8**	**23228.8**
LIABILITIES				
EQUITY AND LIABILITIES				
Equity Share Capital	3209.4	3209.4	3209.4	3209.4
Other Equity	10736.9	10484.2	9681.5	9082.4
TOTAL EQUITY	**13946.3**	**13693.6**	**12890.9**	**12291.8**

NON CURRENT LIABILITIES				
Financial Liabilities				
Leasing Liabilities	179.9	348.0	41.2	0.0
Other Non Current Financial Liabilities	114.7	74.0	91.8	904.8
Provisions	103.8	99.0	46.9	18.5
Deferred Tax Liabilities (Net)	0.0	35.4	169.4	0.0
Other Non Current Liabilities	1399.6	1078.3	1121.0	2602.5
TOTAL NON CURRENT LIABILITIES	**1798.0**	**1634.6**	**1470.4**	**3525.8**
CURRENT LIABILITIES				
Financial Liabilities				
Total outstanding dues to micro enterprises and small enterprises	1,036.7	648.1	386.7	177.3
Total outstanding dues of creditors other than micro and small enterprises	3,042.7	3,140.6	2,281.0	2,532.4
Leasing Liabilities	62.6	77.4	13.6	0.0
Other Current Financial Liabilities	1,681.3	1,827.1	1,534.9	734.9
Provisions	136.8	200.9	367.1	383.5
Other Current Liabilities	3,117.1	2,758.7	3,332.2	3,583.1
TOTAL CURRENT LIABILITIES	**9,077.2**	**8,652.8**	**7,915.5**	**7,411.2**
TOTAL EQUITY AND LIABILITIES	**24,821.5**	**23,981.0**	**22,276.8**	**23,228.8**

(Source:RHP)

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