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Indian Telecom Equipment Industry - Will 5G Drive The Future Growth?

December 2018

The telecom industry primarily comprises of telecom service providers, telecom Equipment manufacturers and suppliers, and passive infrastructure providers. Telecom Equipment can be further classified into consumer-end equipment (i.e. handset, Customer Premises Equipment (CPE) etc.), and Network equipment (i.e. Switches, Routers, Base Trans-Receiver Stations, Multiplexing equipment, Antennae etc.). Due to high capital intensiveness and significant investment required in R&D, telecom equipment manufacturing space is dominated by large players such as Ericsson, Cisco Systems, Fujitsu, Nokia, Huawei, and Qualcomm. The mobile handset space is also dominated by few players like Apple, Samsung, and Xiomi which also requires significant investment in R&D and frequent upgradations.

Over last decade, Indian Telecom Industry had witnessed extensive growth in subscriber base (subscriber base reached 1.19 billion), resulting in India being the second largest telecommunications market with overall tele-density at 91.11 as on August 31, 2018. However, for a nation that showcases *Digital India* to the world, the soft underbelly lies in the limited domestic

telecom equipment manufacturing industry. The telecom services and passive infra sectors have (https://www.communicationstoday.co.in) shown a robust growth reflected by growth in number of subscribers, revenues of service

ENTERPRISE'NETWORKS AND COVERAGE OF TELECOM SERVICES UP TO THE PERMOTE CORNERS OF THE COUNTRY BUT TELECOM ENTERPRISE'NETWORKS ENTERPRISE'NETWORKS BROADCAST (HTTPS://WWW.COMMUNICATIONSTODAY.CO.IN/CATEGORY/EDITORS-DESK/) PERSPECTIVE (HTTPS://REPORTS (HTTPS://WWW.COMMUNICATIONSTODAY.CO.IN/CATEGORY/REPORTS/) BUYERS GUIDE ARCHIVE (HTTPS://WWW.COMMUNICATIONSTODAY.CO.IN/VIDEOS/) Year after year, India is meeting around 90 percent of its robust demand for telecom equipment

Year after year, India is meeting around 90 percent of its robust demand for telecom equipment (accounting for about 8 percent of global demand) through imports. While a liberal trade policy enabling import of telecom equipment with low or no duty has kept both service providers and consumers happy, the limited capacity building for domestic production poses a serious challenge to India's continued success in the telecom sector. Imports had increased by 32 percent from USD 16.56 billion in FY17 to USD 21.85 billion in FY18 mainly on account of shift towards VoLTE technology and fibre optic based infrastructure development. The change in technology also led to consolidation and substantial investment in telecom infrastructure sector in recent past. Airtel's move to acquire Tata Teleservices' mobile business, proposed merger of Bharti Infratel and Indus Tower, merger of Vodaphone and Idea, Reliance Jio's acquisition of RCom telecom assets (awaiting regulatory approvals), Den networks cable business, and Hathways' broadband business depicts the consolidation trend.

On equipment manufacturing front, while mobile handset manufacturing/assembly had seen some traction, the other networking equipment manufacturing remained non-descript. The key challenges that led to this situation includes disadvantages in term of costs for Indian manufacturers in comparison to global peers due to their sheer size and advancement in technology supported by patents, inverted duty structure, lack of incentives to compensate for relatively higher costs, inadequate monitoring and facilitation for manufacturing telecom equipment in country, and restricted availability of financing options for indigenous manufacturer.

There are both economic and security concerns arising out of excessive reliance on foreign manufactured products. Government of India (GoI) had taken steps by laying emphasis on need for developing a domestic base for telecom equipment manufacturing in National Digital Communication Policy, 2018- 'NDCP' (earlier National Telecom policy). NDCP focuses on enabling futuristic technologies such as expansion of 4G, 5G, Blockchain, Artificial Intelligence (AI) etc. with the goal to attract investment of USD 100 billion in digital communication sector. The key areas includes ease of doing business, easy compliance, rationalization of taxes and levies, Right of Way (RoW) approvals, and security of physical infrastructure while addressing issues such as enhancing scope of infrastructure service provider and fabrication of tower, thereby accelerating migration to

4G/5G, incentivizing and promoting fiber connectivity for all new construction and encouraging (https://www.communicationstoday.co.in) investment in broadband infrastructure through fiscal incentives, including accelerated

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- Aim to achieve 'net zero imports of telecommunication equipments' by 2022
- Creation of Telecom Research and Development Fund (TRDF) with initial corpus of `1000 crore for promoting research, innovation, standardization, design, testing, certification, and manufacturing indigenous telecom equipment
- Creation of alternate dispute resolution framework for time bound resolution of patent licensing dispute and common portal for self-declaration of Standard Essential Patents (SEP) by patent holders in Telecom product

Road Ahead

As per various reports, Indian telecom equipment market is estimated to grow from USD 20 billion in FY16 to USD 30 billion by 2020. The extensive growth in subscriber base coupled with planned introduction of 5G technology in 2020 provides a major boost to Telecom Equipment Industry in near future. Gol envisages India's position as synchronized participant in design, development, manufacturing of 5G technologies, products and applications with vision, and mission and goals for 5G India 2020 with increased focus on *Make in India* by incentivising local manufacturing. Further, Gol is making major investment in laying optical fiber cable for expanding reach of telecom network through BharatNet, linking 2.5 lakh gram panchayats of India through optical fiber network (Phase I of the BharatNet is already completed and Phase II is targeted to be completed by March, 2019). It had allocated `10,000 crore in Budget-2018 for creation and augmentation of telecom infrastructure.

With this, one can infer the healthy growth prospects for the industry but the same is not without challenges in terms of ongoing consolidation in the industry (hampering demand prospects) and competitive pressures that had adversely impacted the financial position of telecom service providers (profits have havled in last 3 years for key players) along with restricting their access to debt market for the purchase of spectrums. The 700 MHz band is being used worldwide for deployment of 4G and evolution of 5G services; however, this band is still not with any of the telcos in India as the players did not buy spectrum under this band in October 2016 auction on account of its higher price and the lack of device ecosystem. Thus, the telcos are not really

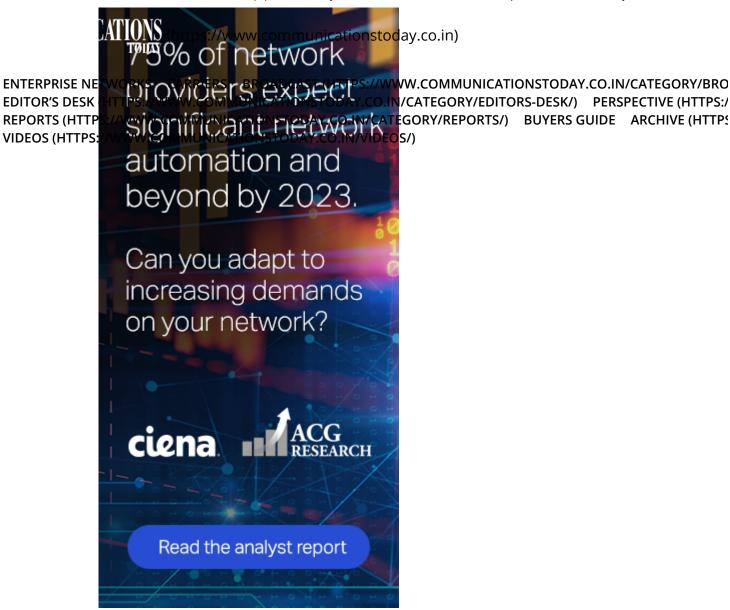
equipped with the most efficient band for 4G services and therefore getting ready for 5G services (https://www.communicationstoday.co.in) in this case seems to be a tough task while the challenges in development of indigenous

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