Reforms for Atmanirbhar Bharat in the Telecom sector

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Abstract

The purpose of this study is to look into reforms in telecom sector for Atmanirbhar Bharat Abhiyaan or Self-reliant India. The objective of this Abhiyaan is to make India self-sufficient in terms of producing items locally and eventually playing a larger part in the global economy. India's telecom industry is the world's second largest, with 1.18 billion subscribers, and the third largest in terms of FDI inflows. The Government of India's Production Linked Incentive plan for Telecom & Networking Products is projected to attract huge investments from global players and assist domestic enterprises in seizing emerging possibilities and become major export players. A study of the (Production Linked Incentive) scheme in the telecom sector has been attempted.

Keywords: PLI schemes, self-reliant, telecom center

1. Introduction

Atmanirbhar Bharat Abhiyaan or Self-reliant India campaign is the vision of new India. On May 12, 2020, India launched a unique economic and comprehensive package of Rs. 20 lakh crores, or 10 percent of the country's GDP, to combat the COVID-19 pandemic. The goal is to make the country and its people self-sufficient and independent. Under the Atmanirbhar Bharat Abhiyaan, India also announced reforms and enablers in seven areas. It introduced the Production Linked Incentive (PLI) scheme as part of its Atmanirbhar Bharat campaign, which offers an outlay of Rs 12,195 crore for the telecom sector.

India is reliant on a significant number of imports from a variety of countries throughout the world, and its import bill is far higher than its export expenditure. During the pandemic, all import and export activity were halted around the world. Goods and service transportation were halted. It was extremely difficult to survive without resources at the time, as commodities could not be imported due to the suspension of transportation services. Hospital beds, Personal Protective Equipment (PPE) kits, COVID test kits, medicines, ventilators, and other essential respiratory and medical equipment, such

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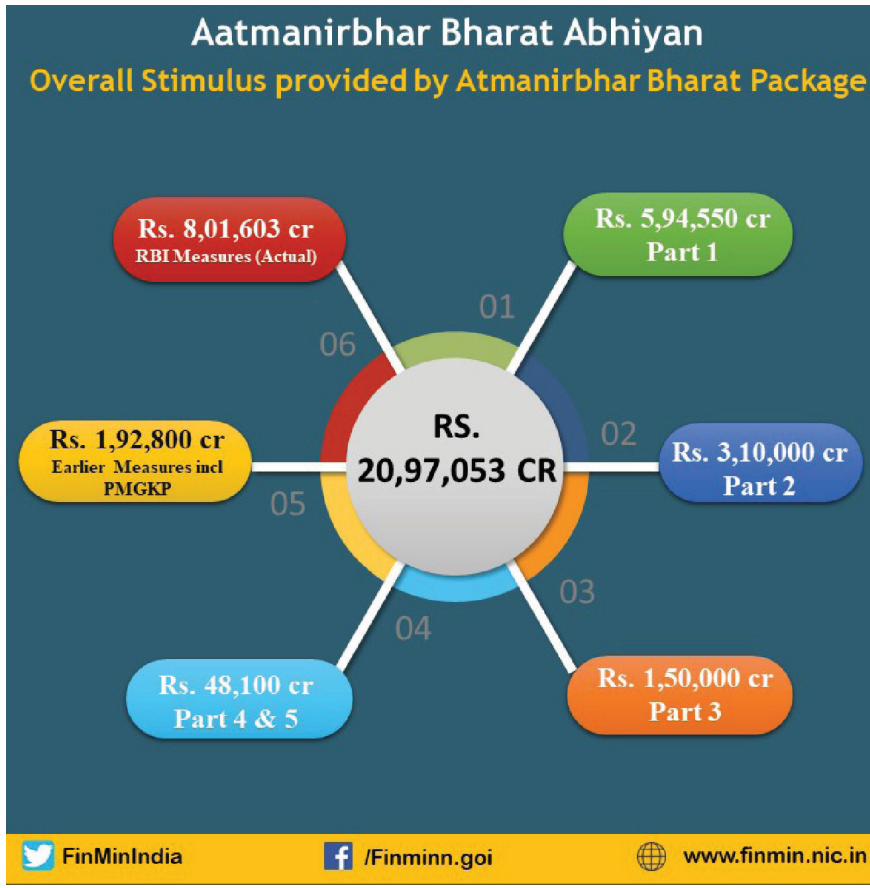

Figure 1. Special economic and comprehensive package
Source: https://www.finmin.nic.in

as hand sanitizers and N-95 masks, were all in limited supply in India. It was then apparent that India's moment to rely on indigenous invention, products, and production had arrived. The Atmanirbhar Bharat Campaign was launched to meet these demands and encourage the manufacturing of these commodities in the country.

2. Conceptual background

Economy, Infrastructure, System, Vibrant Demography, and Demand are the five key pillars of Atmanirbhar Bharat Abhiyaan. Businesses, including Micro, Small and Medium Enterprises [MSMEs] (Phase-I), the Poor, including migrants and farmers (Phase-II), Agriculture (Phase-III), New Horizons of

Growth (Phase-IV), and Government Reforms and Enablers (Phase-V) are the five phases of Atmanirbhar Bharat Abhiyaan.

Atmanibhar Bharat refers to India's ability to generate items on its own and, as a result, play a larger part in the world economy by exporting surplus goods. The impact of the Atmanirbhar Bharat Abhiyaan can be evident in the fact that no PPE kits was produced until March 2020. Today, India has a capacity of more than 2 lakh locally produced PPE kits every day, and this number is rapidly increasing. Previously, India relied on imported personal protective equipment (PPE) and paid a high price for it. In addition, India has developed its own COVID testing kits. Atmanirbhar Bharat Abhiyaan is, in some aspects, a reinforcement of the Make-in-India programme. As a result, the Atmanirbhar Bharat Abhiyaan is a true approach to nourish and flourish India's inventions, as well as to position India as a global leader.

3. India's Telecom Sector: Connecting the world

With 1.18 billion subscribers, India's telecom industry is the second largest in the world. In September 2021, there were 794.88 million broadband subscribers. Affordable prices, expanded availability, the roll-out of Mobile Number Portability (MNP), expanding 3G and 4G coverage, altering subscriber consumption patterns, and a favourable regulatory environment have all contributed to the industry's exponential expansion in recent years. In India, efforts are also being made to build a foundational network for the introduction of 5G technology. The following are the key statistics for India's telecom sector as of September 2021:

- Overall Teledensity of 86.89 percent
- The urban teledensity is 138.72 percent, whereas the rural teledensity is 59.33 percent.
- The proportion of urban and rural telephone subscribers was 55.43 percent and 44.57 percent, respectively, in the total number of subscribers.

India has the most mobile data traffic per smartphone in the world, with 14.5 GB per month. India's telecom sector is the third largest in terms of foreign direct investment (FDI) inflows, accounting for 7.1 percent of overall FDI inflows. The sector employs 2.2 million people directly and 1.8 million people indirectly. In 2022, the sector is predicted to contribute 8% of India's GDP, up from 6.5 percent now. In the telecom sector, 100 percent FDI is allowed, with the automatic route allowing up to 49 percent and the government route allowing more than 49 percent.

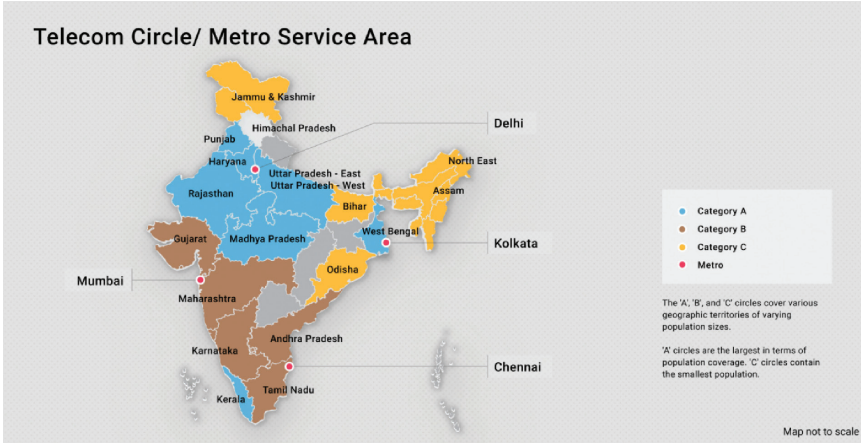

Figure 3.1: Telecom circles / Metro service area
Source: https://www.dot.gov.in

4. Telecom industry scenario in India

By 2025, India is predicted to develop a $1 trillion digital economy. The current contribution of India's telecom industry is reflected below:

- Contribution to India's GDP of 6.5 percent
- Total employment: 4 million
- Subscriptions to smartphones number in the 620 million range
- 100 Smart cities
- By 2025, the number of active internet users is predicted to reach 900 million
- By 2025, an additional 410 million Smartphone users are predicted.

Infrastructure, Equipment, Mobile Virtual Network Operators (MNVO), White Space Spectrum, 5G, Telephone Service Providers (TSP), and Broadband are the subsectors of the telecommunications industry. According to the GSMA (Global System for Mobile Communications Association), India is on track to become the world's second largest smartphone market by 2025, with roughly 1 billion installed devices and 920 million unique mobile customers, including 88 million 5G connections. The Indian telecom tower sector has grown significantly over the previous thirteen years. Every year, an average of 29,000 new mobile towers is installed. In addition, it is anticipated that

5G technology will contribute $450 billion to the Indian economy between 2023 and 2040. In India, 5G spectrum trials are underway to assure the spread of 5G technology across the country. By 2022, the Department of Telecom (DoT) hopes to have 100 percent broadband access in villages, 55 percent fiberization of mobile towers, average broadband speeds of 25 Mbps, and 30 lakh kilometres of optical fibre laid. It plans to fiberize 70 percent of towers by 2024, with average internet speeds of 50 Mbps and 50 lakh km of optic fibre rollouts across the country.

5. Industry trends

- FDI: In the telecom sector, 100 percent FDI is permitted. Total FDI inflows into the sector were $37.66 billion from April 2000 to March 2021, with FDI inflows of $7.5 billion from April 2018 to March 2021.
- Mobile payments: To link the populace and provide financial interfaces, security, and storage, Aadhar Pay, BHIM App, and UPI were created.
- 4G and 5G ecosystem: High data rates, low latency, high reliability and low energy consumption.
- Non-traditional telecom services: Over The Top (OTT), Digital content, e-banking, e-education, e-health, e-commerce.
- Industry 4.0: Internet of Things (IoT), Virtual Reality (VR), Augmented Reality (AR), and Cloud computing technologies enable automation and data transmission.

6. Growth drivers for Telecom Sector

- Increasing internet revenues: Mobile value-added service industry is expected to grow at a Compound Annual Growth Rate (CAGR) of 18.5 percent during the period 2015 - 2020 and reach US $23.0 billion by 2022.
- BharatNet project: Optical fibre cables laid to 163,000 gram panchayats.
- India is one of the highest consumers of data per day with ~5 hours of daily time spend on Smartphone.
- Prime Minister Wi-Fi Access Network Interface (PM-WANI): Provision of public Wi-Fi service through Public Data Offices (PDOs) spread across the country to accelerate the expansion of broadband internet services.

India introduced PLI initiatives for sectors that are heavily reliant on imports as part of its Atmanirbhar Bharat campaign. This should aid India in developing a domestic supply chain for products that will be crucial in the future, such as electronic products (including mobile phones) and pharmaceutical active components, to name a few. It has also expanded the initiative to include major exporting industries such as textiles, which lack understanding of man-made fibres. In the coming years, the PLI scheme is expected to drive India's manufacturing growth. However, developing the ecosystem required for India Inc. to rule the world entails more than simply filling supply chain gaps. It will assist if one has a better knowledge of what Atmanirbhar implies. Apart from their reliance on imports, Indian enterprises are hampered by a number of variables that put them at a distinct disadvantage in comparison to their global counterparts. They, too, must be addressed.

i. Manufacturing costs: India isn't exactly a low-cost manufacturing hub. Although it is less expensive than established economies, other emerging economies fare better. India is placed 107th in the Global Competitiveness Index when it comes to skill set. Indian businesses are being pushed to pay more on employee training.

ii. Logistics costs: India's logistics costs are far higher than its developed-world peers, at 14 percent of GDP. Due to the high level of outsourcing in India, logistics costs primarily refer to transportation costs, whereas in advanced countries, they also encompass planning, procurement, and warehousing. In comparison to developed countries, India's logistics costs are at least three times higher.

iii. Compliance costs: Regulatory and other compliance costs are considerable for Indian businesses. Through digitalization, the government has been attempting to eliminate this.

iv. Investment in Research & Development: Over the years, total spending in R&D and innovation has decreased. It was 0.84 percent of GDP in 2008 and 0.6 percent in 2018. The defence and space sectors account for the majority of R&D spending. It's in the auto and pharmaceutical industries in the private sector. Clearly, there is a lack of investment in cutting-edge technologies.

v. High interest rates: While India may be experiencing a time of low interest rates, the cost of borrowing in India is far higher than in developed countries. Only if interest rates fall can Indian products compete globally.

vi. Trade policies: India must step up its efforts to establish trade agreements, as other emerging countries do, in order to become more competitive and attract investment.

7. PLI scheme to promote Telecom and networking product manufacturing in India

The PLI scheme in Telecom & Networking Products was introduced in India to improve manufacturing capacity and boost exports in the telecom sector. The PLI plan in the telecom sector is projected to draw huge investments from global players while also assisting domestic enterprises in seizing emerging opportunities and becoming major export players. The total cost of the PLI plan is ₹12,195 crores. The telecom industry plays a critical role in promoting economic progress. Telecom is critical infrastructure and a vital enabler of digital connection and India's digital transformation. As a result, incentivizing telecom product production in India was both necessary and desired.

i. Objectives: The PLI scheme aims to stimulate the manufacturing of telecom and networking products in India. In order to stimulate "Make in India," this financial incentive is intended to boost domestic manufacture and attract investments in the target segments of telecom and networking products. The plan is also anticipated to enhance exports of "Made in India" telecom and networking devices.

ii. Target Segments: Support will be granted under the scheme to companies/entities in India that manufacture specific telecom and networking devices, as indicated below.

- Core Transmission Equipment
- 4G/5G, Next Generation Radio Access Network and Wireless Equipment
- Access & Customer Premises Equipment (CPE), IoT Access Devices and Other Wireless Equipment
- Enterprise equipment: Switches, Routers

iii. Eligibility: It will be contingent on meeting a minimal threshold of cumulative incremental investment over a four-year period and incremental sales of manufactured goods (as opposed to traded goods) over the base year. The total investment can be made all at once, as long as the annual cumulative requirement of four years is reached. To be eligible for an incentive payment, an applicant must meet all of the minimal threshold requirements. To reach the necessary additional investment and sales criterion, the company/entity may invest in one or more qualified items. Contract manufacturers, as specified in the 2017 FDI policy, will be included in the scheme.

For MSME, a minimum investment requirement of 10 crores will be set, while for others, a minimum investment threshold of 100 crores will be set. The cost of land and construction will not be considered an investment. Any recipient under this PLI programme shall be unable to receive benefits under any other Central Government PLI scheme for the same products. However, qualifying for the PLI plan will not affect eligibility for any other state/UT government scheme, and vice versa.

Due to the budgetary outlay's fixed cap, the total number of beneficiaries will be limited. Beneficiaries shall be chosen using a transparent manner in accordance with the scheme's standards. To be eligible for the incentive, each recipient must fulfil the minimum incremental net sales criteria over the base year. A ceiling will also be set on the amount of incentive paid to each beneficiary.

iv. Base Year: For the purposes of calculating cumulative incremental sales of manufactured products net of taxes, the financial year 2019-20 will be used as the base year (as distinct from traded goods). Baseline data on beneficiary manufacturers' production will be collected in order to calculate and verify cumulative incremental production over the base year.

v. Tenure of the scheme: The plan will go into effect on April 1, 2021. The investment will be allowed to be made over a four-year period, subject to qualifying incremental annual requirements, and the scheme will offer support for a five-year term.

vi. Review and Monitoring: The PLI plan will be monitored by an Empowered Group of Secretaries (EGoS) chaired by the Cabinet Secretary, who will conduct periodic reviews of the scheme's outlay and take appropriate action to ensure that the expenditure is within the prescribed outlay. The DoT will develop and distribute the scheme guidelines. Within the parameters of Cabinet approval, EGoS can make any changes to the scheme rules necessary to guarantee successful implementation on the ground. The Dot will choose the candidates for the scheme.

vii. Incentive Outlay: The PLI scheme would be implemented over a five-year period with a total budget of Rs 12,195 crore.

viii. Applicable Incentives: On qualified sales over the base year, the appropriate incentive rate for MSMEs will be 7% in year one and year two, 6 percent in year three, 5 percent in year four, and 4 percent in year five. On qualified sales over the base year, the applicable incentive rate for categories other than MSME will be 6 percent for Years 1 and 2, 5 percent for Years 3 and 4, and 4 percent for Year 5. The incentive will only be paid if annual investment targets are satisfied.

ix. Incentive per Company: The incentive will be applied to sales of manufactured finished items, net of taxes, discounts, commissions, and other expenses (as opposed to traded goods), as long as the company meets the cumulative investment criteria. Each applicant's total reward will be capped based on the total investment made at the time of application.

In the bigger goal of "Digital India," telecommunications devices play a critical role. On February 24, 2021, the DoT announced the "Production Linked Incentive Scheme" with the goal of increasing domestic manufacture, investments, and exports of telecom and networking devices. The scheme's operational instructions were released on June 3rd, 2021, following lengthy talks with stakeholders. The scheme aims to develop global champions from India, with the ability to scale up and penetrate global value chains through the use of cutting-edge technology.

The scheme is open to both MSME and non-MSME businesses, as well as domestic and international businesses. Manufacturers who use Indian technology in their goods are also urged to apply. The DoT will approve ten applications in each of the MSME and non-MSME categories. At least three domestic companies will be eligible out of the ten applications in the non-MSME category. On the basis of committed cumulative incremental investment during the scheme duration, the proposals will be shortlisted from highest to lowest. Over the next five years, it is expected that full utilisation of the scheme funds will result in incremental production of roughly Rs 2.4 lakh crore and exports of around Rs 2 lakh crore. The initiative is also estimated to bring in roughly Rs 3000 crore in investment and create a large number of direct and indirect jobs.

8. Take away points

The Atmanirbhar Bharat Abhiyan aims to accomplish two things. For starters, interim measures like liquidity infusion and direct cash transfers for the poor would act as shock absorbers for people who are experiencing extreme stress. Second, long-term reforms in growth-critical industries to make them more globally competitive and appealing. Together, these steps have the potential to resurrect economic activity that has been harmed by the COVID-19 pandemic and open up new growth prospects in areas such as agriculture, SMEs, power, communications, coal and mining, defence and aviation, and others.

On October 14, 2021, the DoT announced that, in accordance with the PLI scheme guidelines for promoting Telecom and Networking Products manufacturing in India, a total of 31 companies, consisting of 16 MSMEs and 15 Non-MSMEs (8 Domestic and 7 Global), have been found eligible and are

being approved under the PLI scheme. Furthermore, based on commitments made by applicants, these 31 applicants are estimated to invest a total of 3345 crore over the next four years, resulting in additional employment of more than 40,000 people and a total production of roughly 1.82 lakh crore throughout the scheme's duration. The initiative is meant to encourage domestic R&D of new products, with 15 percent of the pledged expenditure set aside for this purpose. On October 10, 2021, the first call over an Indian 4G network was made by state-run teleco Bharat Sanchar Nigam Limited (BSNL), indicating that the vision of Atmanirbhar Bharat is taking shape. Based on this made in India technology, BSNL plans to upgrade roughly 13,533 2G/3G sites into 4G sites.

9. Conclusion

One of the most significant initiatives to uplift India and Indians is the allocation of the Rs. 20 lakh crore for the growth of the Indian economy. In the midst of Covid-19, this is a ray of hope for India. The scheme benefits people from all walks of life; it is applicable to all sectors of the economy. Every Indian will benefit from this scheme, which will raise the average person's standard of living. The Atmanirbhar Bharath plan is the sole unique development initiative in India. All members of society will be empowered to lead a dignified life. If the strategy is implemented effectively, it will serve as a model for the entire world. In the bigger concept of "Digital India," the telecom sector plays a critical role. The response of domestic and international manufacturers to the DoT's PLI scheme demonstrates strong faith in "Atmanirbhar Bharat", Make in India, and the scheme's goal of creating global champions out of India with the ability to grow in size and scale using cutting-edge technology and thus penetrate global value chains. The positive response to the PLI plan, as well as the recent success in designing and developing a made in India 4G network, will pave the way for being Atmanirbhar in the telecom sector. In the coming years, a new vibrant India will emerge. This approach can be used to solve a variety of problems.

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