

AN ABRIDGED VERSION

MAKING INDIA A GLOBAL HUB FOR HANDSET MANUFACTURING



**A STUDY ON DISABILITIES AND SMART POLICY MEASURES
INCLUDING REPLACEMENT OF
MERCHANDISE EXPORT INCENTIVE SCHEME (MEIS)**

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FOR THE MOBILE PHONE INDUSTRY'

CHAPTER 1/ EXECUTIVE SUMMARY

1.1 IMPORTANCE OF THE MOBILE HANDSETS INDUSTRY FOR INDIA

Electronics and System Design Manufacturing (ESDM) is of strategic importance and a high priority area for India because of its ever-expanding influence on various facets of modern living, as well as its potential to generate sizeable direct and indirect employment. The Indian electronics market is growing at a fast pace and is expected to reach \$150-175 billion by 2025 from a level of \$69.6 billion in 2018.

Mobile phones account for about \$26 billion of the electronics industry in India and represent the largest market segment in it. With the imminent transition to 5G technology and the growing popularisation of the Internet of Things (IoT), an estimated 25 billion “things” would be connected worldwide through IoT devices by 2025. This is going to further stimulate the usage of smartphones and the use of the device is going to grow in India from its current level of half a billion to 1.1 billion by 2025. If a significant portion of these phones are not produced in India, the domestic demand would imply a huge import requirement.

1.2 MOBILE MANUFACTURING IN INDIA

Mobile manufacturing in India started with Nokia, Samsung, Motorola, LG and Sony Ericsson in the mid-2000s and grew steadily between 2008-2012, reaching over 155 million handsets per annum. Nearly 70% of the mobile phones valued at Rs. 12,000 crore were exported in 2012. However, due to a freeze on assets as a consequence of a tax dispute, Nokia stopped production in 2014. As a result, the component ecosystem that Nokia had built in India, had to shut down. In 2014, India's production dipped to just 58 million units, with marginal exports.

In a bid to rebuild the mobile phone industry, Government of India (GoI) implemented certain subsidy schemes and an import substitution strategy Phased Manufacturing Programme (PMP) in 2015. PMP created differential duty dispensation for mobile manufacturers in India (Pre-GST). This created a positive arbitrage of 8-9% for mobile phone manufacturers based in India. Later in 2017, post GST, basic custom duty at the rate of 10% was imposed on mobile phones and this created a positive arbitrage of 10% for mobile phones manufactured in India. Current rate of basic custom duty on mobile phones is 20%.

The PMP is based on the assumption that levying customs duties will encourage manufacturers to shift base to India, increase the domestic value addition and discourage imports. The aim is to ensure that the mobile phone, its assemblies and components are manufactured in India.

Coupled with capex subsidy under the Modified Special Incentive Package Scheme (M-SIPS), Merchandise Export Scheme of India (MEIS) and support from state governments, the mobile phone manufacturing activity in India has gained pace. There are 268 factories - manufacturing mobile phones, chargers, battery packs, wired headsets and other components and generating 7 lakh jobs.

In 2017-18, India produced 225 million mobile phones (valued at Rs. 1,32,000 crore) and emerged as the second largest mobile manufacturer globally, pushing Vietnam down to the third place. In 2018-19, India manufactured 290 million mobile phones (valued at Rs.1,81,200 crore). Though these are impressive production levels, India's domestic demand is high and exports very small compared to the major exporters in the world. India has the potential for becoming both a major producer and exporter of mobile phones in the world, provided appropriate policies are implemented for achieving this potential.

1.3 MOBILE PHONE MANUFACTURING IN THE WORLD

In 2018-19, the global mobile phone market was about \$495 billion and it is projected to touch \$648 billion by 2025. It is expected that the global market would consist of 80% smartphones in 2025, and feature phones would be only 20%. India will mirror this trend.

The global mobile handset space is dominated by 5 companies - Samsung, Apple, Huawei, Oppo and Vivo. Together they hold 83% of the market. The manufacturing for these five companies is based out of 2 countries - China (including Hong Kong) and Vietnam.

In turn, these large companies have an ecosystem (Global Value Chain (GVC)) of suppliers who supply components and allied services. It is estimated that the GVCs supply nearly 80-85% of the components to the 5 lead firms. Thus, the GVCs are dependent on these 5 large companies for business and will follow the leading brands so that the integrity and speed of the supply chain remains intact. It is obvious that the industry is consolidated, and any new entrant will have an uphill task to penetrate the market. The global firms thus have the ability to increase the scope and depth of India's ecosystem for mobile phones, parts and components.

1.4 AMBITIOUS TARGETS OF NATIONAL POLICY ON ELECTRONICS, 2019

The "National Policy on Electronics 2019" (NPE 2019), the successor to the "National Policy on Electronics 2012", lays special emphasis on promoting the growth of mobile manufacturing. The ambitious target set for 2025 encompasses producing 1 billion mobile handsets in India worth \$190 billion, of which 400 million phones valued at \$80 billion would be sold domestically and 600 million mobile phones worth \$110 billion would be exported.¹

¹ Refer to Paragraph 4.1 of "National Policy on Electronics 2019"

\$190 billion of mobile phones would translate into a 29% global market share for India. By 2025, "National Policy on Electronics 2019" hopes to achieve 3.4 times (1000/290) the volume and 7.6 times (190/25) the value and 69 times (110/1.6) the value of exports achieved in 2018-19.

Achieving these targets will not be feasible unless India has a coordinated work plan between the government and the private sector, including large lead firms who can help build an ecosystem for component/assembly manufacture in India along with R&D, and higher domestic value addition.

1.5 LIMITATIONS ON DOMESTIC VALUE ADDITION

A common trend visible across geographies is that 100% value addition for a mobile phone does not take place in a single country. Even in the case of Vietnam and China, value addition in mobile phones (smartphones & feature phones) is 23% and 35% respectively. Value addition in China is 50% for smartphones and 90% for feature phones.

The results of the PMP, focused on increasing domestic value addition, have begun to plateau. In spite of tariff intervention, manufacturing operations of 5 assemblies/components i.e. Mechanics, Die cut parts, Mic & Receiver, Camera module, Connectors could not be started.

The PMP-2019 for two assemblies, i.e. Display Assembly, Touch Panel/Cover Glass Assembly was deferred as it was understood that India should not increase the cost base of the domestic industry and make it less competitive since the focus was and is shifting to exports of CBUs.

PMP cannot trigger large-scale shift of component manufacturing to India as it is a function of scale of production and the requisite skills and operational conditions to produce complex technological parts and components. The domestic market in India is not big enough for the component manufacturers to shift base to India. While the initial phases of PMP focused on relatively less complex products, now the products covered by PMP are not easy to produce within the country. As a result, it is difficult for the

strategy of import substitution aimed at increasing value addition to succeed. In this situation, an import substitution strategy cannot arrest the rising import bill of components required for the strong domestic demand for mobile phones. Inability to produce the parts and components would delay the progress of the industry, make production of mobile phones expensive and non-competitive. It is pertinent to note that China's imports of electronics has risen to USD 400 billion, which has positioned it optimally in the global supply chain. This import supports export of over USD 600 billion and a domestic industry of USD 350 billion. And hence, India should focus on large exports which in turn will naturally shift capacity for components and sub-assemblies to India, ultimately leading to enhancement of local value addition and gradual reduction in net foreign exchange flow.

1.6 STRATEGY SHIFT NEEDED

In 2018-2019, with a value addition of 18%, domestic production of USD (USD) 26 billion, exports of USD 1.66 billion, net foreign exchange outflow was around USD 12.50 billion due to the import of parts and components. For the huge increase in domestic production and demand, net foreign exchange outflows would continue unless exports and domestic value added are increased. If exports are 130% of the domestic production and value addition is 35%, then net foreign exchange earnings could become positive. Hence, the focus of government policy should be on export promotion and not on import substitution through greater value addition; even the increase in domestic value addition requires large additional investment and production, with access to a global demand much larger than India's domestic demand.

China (61%) and Vietnam (11%) together account for about 72% of global mobile phone exports. The manufacturing operations of the lead firms (i.e. global large firms that control global value chains) are also based in China & Vietnam. Thus, for India to gain an appreciable share of exports, a substantial part of the manufacturing operations of the lead firms must shift to India. For this to happen, India needs to position itself as an attractive manufacturing and exporting hub, by offering suitable incentives and improving ease of doing business.

This strategy would yield significant positive results through achievement of economies of scale, technological upgradation spurred by large global firms, and a strong push to domestic capacity building. For this, an ecosystem involving both domestic and global firms will need to be nurtured.

1.7 CHALLENGES IMPEDING GROWTH

The industry is facing several key challenges:

1. Major delays in getting approvals
 2. Approved financial incentives are not disbursed on time or delayed inordinately
 3. Poor implementation of policies adversely affects the credibility of the announced schemes
 4. Erratic and polluted power supply leads to additional costs and disrupts the business cycle
 5. Inadequate government incentives & support compared to China and Vietnam
 6. Vietnam and China match/exceed the new reduced corporate income tax rates introduced by the India with effect from October 1, 2019. Therefore, no big advantage.
 7. Inverted GST structure (GST on components of mobile phones is @ 18% and on mobile phones 12%). As a result, the capital is blocked for a couple of months leading to cash flow issues & cost overrun.
 8. Rigid and archaic labour laws
 9. Ease of doing business is low
 10. Frequent policy changes
 11. Delay in customs clearance at ports/airports
 12. Inadequate infrastructure
 13. Inadequate trade facilitation
 14. Lack of trained manpower & inadequate reimbursement of training costs
 15. High cost of capital
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1.8 HIGHLY CONDUCTIVE INVESTMENT ENVIRONMENTS OF VIETNAM & CHINA

Considering the scale of investments, the technology requirements and the imperative of creating an ecosystem to cater to the domestic demand and exports, the importance of attracting investments, especially from global firms, assumes special significance.

Indian Cellular and Electronics Association (ICEA) has identified ten major factors (with different individual weights), that influence investment decisions. A qualitative comparison of India, Vietnam and China based on these factors has been made. The assessment reveals that Vietnam is 1.7 times more attractive for investors, while China is twice as attractive compared to India.

1.8.1 SUPPORT POLICIES OF CHINA & VIETNAM CREATE DISABILITY FOR MANUFACTURES IN INDIA

China & Vietnam offer incentives and support policies to investors which makes manufacturing competitive at the global level:

1. Making available quality infrastructure and skills
2. Low charges for use of the infrastructure made available
3. Subsidies for reducing costs and improving competitiveness
4. Improving the ecosystem for the development of the supply chain in the domestic market
5. Ease of doing business (aim to reduce costs and time taken for operations)
6. Focus on attracting lead firms in Global Value Chains, with additional incentives
7. Stability of policy, with periodic reviews to revise the incentive and facilitation schemes as required

The incentives and support measures are aimed mainly at reducing operational time and costs, and increasing retained profits, leading to higher competitiveness. The cumulative impact all of these incentives and support schemes in Vietnam and China vis a vis India has been estimated. It reveals that the cost reduction or competitiveness gains for investors ranges from 9.4% to 12.6% for Vietnam and 19.2% to 21.7% for China.

In addition to creating a strong export base, these policies also aim to enabling creation of large domestic firms, particularly in China. In India, this would be eminently possible particularly for the entry level smart phones, provided appropriate policy/incentivization support is made available.

1.8.2 INCENTIVE/SUPPORT SCHEMES PROVIDED BY GOVERNMENT OF INDIA

The Indian government has been aware of some if not all these disabilities faced by Indian firms. It has also laid down a framework for providing support schemes for the mobile phone manufacturing industry first in “National Policy on Electronics 2012” which was followed up and expanded in “National Policy on Electronics 2019”. The major incentives and support schemes for the sector are as follows:

1. Merchandise Export Incentive Scheme (MEIS)
2. Modified Special Incentive Package Scheme (M-SIPS)
3. Export Promotion Capital Goods Scheme (EPCG Scheme)
4. Export Oriented Units (EOU) Scheme
5. Duty Exemption/Remission Schemes
6. Duty draw back
7. Electronic Manufacturing Clusters (EMCs)
8. Electronics Development Fund and Skill Development Programme

Apart from the central government schemes listed above, some state governments also provide their individual package of incentives to attract investments.

1.8.3 UNCERTAIN INVESTMENT ENVIRONMENT IN INDIA

The following Indian export subsidy measures were challenged by the US in the World Trade Organisation (WTO):

1. Merchandise Exports from India Scheme
2. Exports Promotion Capital Goods Scheme
3. Duty Free Imports for Exporters Programme
4. Export Oriented Units Scheme and sector specific schemes, including the Electronics Hardware Technology Parks Scheme (EHTPs)
5. Special Economic Zones (SEZs)

MEIS forms the backbone of India's current export promotion strategy, with direct benefits ranging from 2% to 5% of export earnings. The other schemes also offer benefits but these schemes are not attractive as MEIS.

The challenge at WTO has created uncertainty in the investment environment and companies are deferring the decision to invest in India till there is clarity on the continuation/ replacement of the above schemes. Needless to add the GoI needs to resolve this on top priority.

The WTO in its panel report has held the five subsidy schemes to be inconsistent with the Subsidies and Countervailing Measures (SCM) Agreement, on account of being prohibited subsidies that are contingent upon export performance. In view of the same, the WTO has stipulated time periods for withdrawing these schemes- 90 days for DFIS, 120 days for MEIS, EPCG, EHTP and 180 days for SEZ scheme.

1.9 MINIMUM SUPPORT REQUIRED TO ATTRACT GLOBAL INVESTMENT IN INDIA

Taking account of the disabilities faced by India, the support schemes implemented by China and Vietnam, the concerns and suggestion of Indian industry, the study has concluded that an incentive of 8-10% of the turnover would be adequate to attract global scale investment that would achieve the production and export objectives of NPE 2019, and create a vibrant ecosystem for mobile phone production in India.

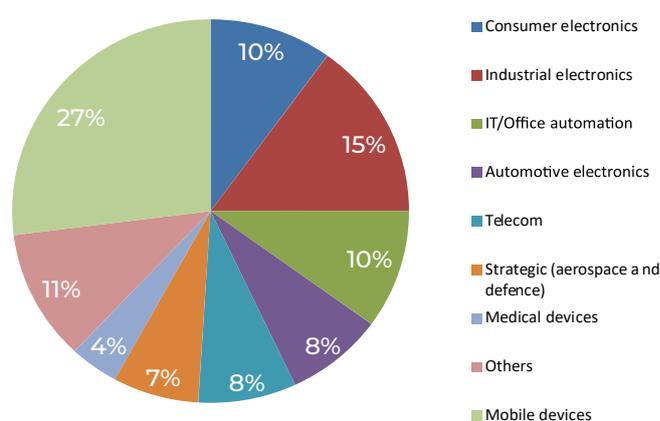
CHAPTER 2/ CONTRIBUTION OF MOBILE PHONES TO INDIA

2.1 ESDM SECTOR

The ESDM sector is critical for India's growth, and for innovation and disruption across multiple segments of the industrial sector. The Indian electronics market is one of the largest in the world and is expected to reach a turnover of USD400 billion in 2025, up from USD 69.6 billion in 2012. The market was projected to grow at a Compounded Annual Growth Rate (CAGR) of 29.4% during the period 2015-2020.² While the growth rate has been lower than expected it has still achieved double digit growth rates, in comparison to the worldwide manufacturing growth rate of 2% for this sector. India aims to achieve a target for electronics, to the tune of 25% of GDP for the year 2025, which will position India as one of the top 5 manufacturing hubs and employers in the world. The growing customer base and the increased penetration in the consumer durables segment has provided an excellent scope for the growth of the Indian electronics sector. Moreover, greater digitisation combined with increased broadband penetration in the country would open up newer avenues for companies in the electronics industry.³ The average output multiplier of this sector ranges between 2.11 and 2.25. This implies that for every 1% increase in output in this sector, there is a resultant increase in the overall output in the economy by over twice as much.⁴

Electronic components and products are widely used in sectors like lighting, automotive, communications, etc. making them agents of change for the economy as a whole, and enabling the creation of products that enhance efficiency. Mobile devices account for about 27% of the Electronic Products industry in India; it is also a sector specifically emphasised in NPE 2019 . Other segments of ESDM are represented in figure 2.1:

FIGURE 2.1: THE ESDM SECTOR



Import of mobile phones and components is observed to be one of the top imports globally. A study on the imports of the top 10 importing nations in the world has elucidated that while electronics broadly constitute the top 3 ranks in products imported, it is mostly mobile phones and their components (including a few others) that fare either rank 1 or 2 of these imported products. This is elaborated in Table 2.1, which shows the huge global market for mobile phones, which will continue to grow⁵. Thus, this sector has a major potential in terms of both the technological impact as well as major export opportunities.

² IBEF, 2019.

³ Refer to Pg 16 & 23 of GSMA, 2018

⁴ Shastri, 2005.

⁵ GST Rate & HSN Code for Electrical Parts & Electronics: Chapter 85: Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles; HS 8517: Telephone sets, incl. telephones for cellular networks or for other wireless networks; other apparatus for the transmission or reception of voice, images or other data, incl. apparatus for communication in a wired or wireless network [such as a local or wide area network]; parts thereof; HS 851712: Telephones for cellular networks "mobile telephones" or for other wireless networks

TABLE 2.1.

RANKING OF MOBILE PHONES IN IMPORTS OF TOP 10 IMPORTING NATIONS

COUNTRY	RANKING FOR HS 85	RANKING FOR HS 8517* WITHIN HS 85
USA	1	1
GERMANY	2	1
JAPAN	1	1
UNITED KINGDOM	3	1
FRANCE	3	1
NETHERLANDS	2	1
ITALY	3	1
CHINA	1	2
HONG KONG	1	2
SOUTH KOREA	1	2

**HS 8517 includes- telephonic sets, incl.telephones for cellular networks or for other wireless networks; other apparatus for the transmission or reception of voice, images or other data, incl. apparatus for communication in a wired or wireless network [such as a local or wide area network]; parts thereof*

Source: ITC Trade Map

2.2 MOBILE MANUFACTURING SECTOR IN INDIA

India's mobile manufacturing began in the mid-2000s with Nokia. The tax exemptions offered through SEZs in India attracted Nokia, which set up a large plant at Sriperumbudur in Tamil Nadu. Manufacturing grew between 2008 and 2012 in India, reaching over 155 million handsets, of which nearly 70% were exported. However, Nokia closed production in October 2014, due to a government freeze on assets in response to a tax dispute. Various component manufacturing facilities set up to support Nokia's manufacturing activity consequently shut down. The lack of policies to attract other smartphone manufacturers led to the collapse of India's mobile manufacturing. In 2014, production dipped to a meagre 58 million units with marginal exports.

Since 2014, the tide has begun to turn and India is rebuilding its mobile manufacturing base. India has attracted an investment of roughly USD 1 billion (including fixed and working capital investment) and produced 225 million mobile handsets worth USD 20 billion in 2017-18, compared to 60 million worth USD 2.99 billion in 2014-15⁶. The industry is expected to maintain this growth momentum. In the Financial Year (FY) 2018-2019, mobile handset manufacturing in India was nearly 290 million.⁷ Of these, 149 million (49.3%) were expected to be Smartphones, 55 million (18.2%) Smart Feature phones and the remaining 98 million (32.5%) Feature phones.⁸ This rapid growth in the mobile handset market and production base is expected to continue for at least the next six years i.e. till 2025. In 2025, the global market is expected to be around USD 648 billion and India hopes to occupy approximately 18% of that market.⁹ The use of 5G and IoT will lead to a vibrant app economy with new content and functionalities. It is estimated that about three quarters of the global internet base will comprise of mobile phones; and that 25 billion "things" would be connected through IoT devices by 2025. This growth stimulus will also result in augmentation of the smartphone connections. India is expected to have 800 million smartphones by 2025, an increase of almost 450 million from the present period.

⁶ ICEA-McKinsey, 2018.

⁷ Information provided by ICEA.

⁸ Information provided by ICEA

⁹ "National Policy on Electronics 2019"

2.3 BUILDING THE MOBILE PHONE MANUFACTURING INDUSTRY: SHIFTING FOCUS FROM IMPORT SUBSTITUTION TO BUILDING IMPORT COMPETITIVENESS

In an attempt to rebuild the collapsed mobile phone industry, and make India a manufacturing hub for mobile phones, the GoI implemented an import substitution strategy named Phased Manufacturing Programme (PMP) in 2015. To ensure that a large part of the supply chain of mobile manufacturing sets up base in India and the value addition happens in India, this plan introduced a differential duty dispensation for mobile manufacturers and created an arbitrage of about 9-10% in India (pre Goods & Services Tax (GST)). In 2017, post GST, basic customs duty at 10% was imposed on mobile phones to create arbitrage. In the Union Budget 2018, the basic customs duty on mobile phones was increased to 20% thus increasing the arbitrage available in India. The mobile phone manufacturing industry in India has achieved value addition of 17%. Most of the core components continue to be imported. This tariff-based approach has not contained the imports of components and sub-assemblies and as a result, the import bill continues to rise.

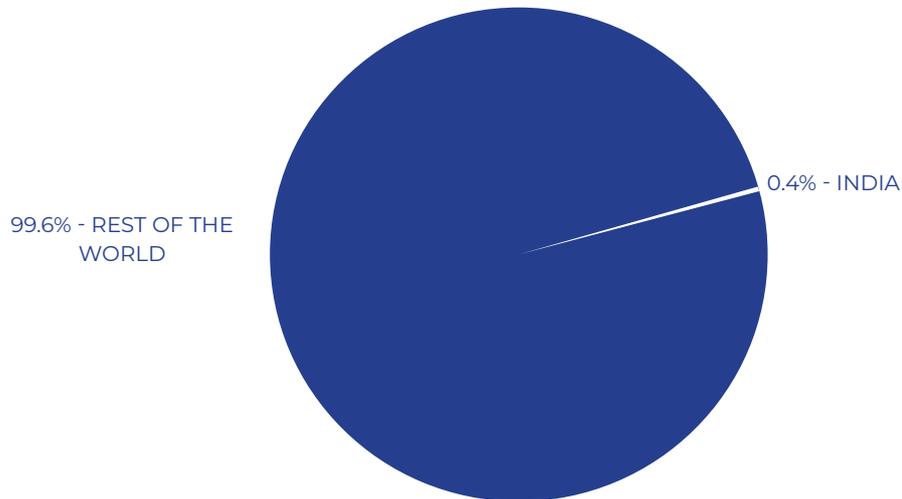
FIGURE 2.2.**INDIA'S SHARE IN GLOBAL MANUFACTURING AND EXPORTS**

Figure 2.2 shows that in 2017-18, India exported mobile phones worth USD 1.1 billion, which was 0.4% share of the global exports. It is evident from the above that India's focus on import substitution has not only meant a small presence in the global mobile phone market, it will continue to require significant imports of parts and components. In effect, India has failed to build or sustain export competitiveness, especially with the problems evident in PMP. Thus, there has been nominal value addition in this sector. As explained earlier, changing this situation requires a major increase in the volume of production and investment in the sector, particularly by global lead firms which are also important for generating a large volume of exports from the country. This is essential for India to build a stable ecosystem for mobile manufacturing and a robust supply chain, given the vast share that mobile phones

occupy in the ESDM sector globally. Improving domestic capabilities which are essential for both sustained growth and climbing up the global value chains, need to be combined with investment, production and exports. This requires a change in policy-orientation and a reconfiguration of the support policies in India.

CHAPTER 3/ SUPPORT SCHEMES PROVIDED BY INDIA

The GoI has provided for various policies, schemes and incentives to the industry in order to build the mobile manufacturing competitiveness of the country. The National Policy on Electronics 2012 and 2019 serve as vision documents for the entire ESDM sector with specific turnover and export targets. Some of the incentives address manufacturing from the production side, while there are others that specifically promote exports.

3.1 POLICY SUPPORT

1. **National Policy on Electronics, 2012:** The “National Policy on Electronics 2012” envisioned creating a globally competitive ESDM industry. The “National Policy on Electronics 2012” focused on indigenous manufacturing along the entire value chain and development of high-quality products at affordable prices. The policy aimed at achieving a turnover of USD 400 billion with an investment of USD 100 billion and creation of employment to the extent of 28 million.¹⁰
2. **National Policy on Electronics, 2019:** The “National Policy on Electronics 2019” set an objective to achieve a turnover of USD 400 billion by 2025 in ESDM sector. The policy envisaged a production of 1 billion (100 crore) mobile handsets worth USD 190 billion. The policy shifted its focus from import substitution to exports. It sets a target to export 600 million handsets worth USD 110 billion and to produce 400 million mobile handsets worth USD 80 billion for the domestic market.¹¹

3.2 CENTRAL-LEVEL INCENTIVES PROVIDED BY THE GOI

The central government has introduced numerous schemes/initiatives to promote manufacturing. Some of these schemes have tried to encourage investment in the electronics manufacturing sector, while others have tried to build the domestic capacity in the phased manner by levying duties on the imports. There are schemes that have focused on addressing infrastructural deficiencies by directing grants and subsidies specifically towards basic and essential service development.

1. **Modified Special Incentives Package Scheme (M-SIPS)**
 - **Summary:** Electronics industry requires high investment. In order to attract investments in the electronics sector, the GoI notified M-SIPS on 27th July 2012. The scheme was instituted to neutralise the loss in competitiveness for the Indian electronics industry due to high cost of power and capital, weak domestic supply chain links and low value addition. The scheme was made available for both new projects and expansion projects. It provided capital subsidy of 20% in SEZ and 25% in non-SEZ for units engaged in electronics manufacturing, and reimbursements of Countervailing Duty (CVD)/ excise for capital equipment for the non-SEZ units. For some of the high capital investment projects like fabs, it provided reimbursement of central taxes and duties. The investment threshold varied from Rs 1 Crore to Rs 5000 Crores depending upon the type of the project. The incentives were available for 10 years from the date of approval. The scheme was initially opened for 3 years and further extended till 31st December, 2018.
 - **Status:** The M-SIPS acted as a catalyst for investment. Industry can no longer avail the benefit as the tenure of the scheme got over on 31st December 2018. The M-SIPS received 412 applications, covering investment level of INR 1,10,424 crore. Of the total applications:

¹⁰ Refer to Section IV of “National Policy on Electronics 2012”

¹¹ Refer to Section IV of “National Policy on Electronics 2019”

- 50 applications did not meet the criteria
 - 173 applications are still under appraisal
 - 211 applications have been approved covering investment level of INR 55,069 crore
 - 28 applications have been recommended, covering investment of INR 12,843 crore
 - Among the approved applicants:
 - 161 applicants started incurring investments
 - 145 applicants commenced operations
2. **Electronics Manufacturing Cluster (EMC)**
- **Summary:** EMC, notified on 22nd October 2012, provides support for the creation of world class infrastructure for attracting investments in the ESDM sector, through the creation of a Special Purpose Vehicle (SPV). It covers both Brownfield and Greenfield clusters. The scheme provides financial assistance as grant in aid for Basic Development (internal roads, storm water drains etc.), Essential Services (e.g., electricity sub-station & distribution, backup power plant, sewage lines, water treatment plant). Welfare Services (employee hostels & mess, hospitals etc.), Support Services such as R&D, incubation and consultancy services, IT infrastructure, and Manufacturing Support (e.g. Tool Room, CAD/CAM design house, testing and certification facility). For Greenfield and Brownfield clusters, the assistance is restricted to 50% and 75% of the project cost respectively, subject to a ceiling of Rs.50 crores for every 100 acres of land. Over and above the central government support, some state governments provide an additional subsidy of 25% for the scheme.
 - **Status:** As of February 2019, approvals had been given for 20 Greenfield clusters and Common Facility Centres in 3 Brownfield clusters in 15 states, which are expected to attract INR 54,800 crore of investments and generate 6.43 lakh jobs. While 121 units have booked land in the clusters, 16 units have started commercial production with an investment of INR 4,366 crores providing employment to 8,221 persons. The outlay of these approved projects is INR 3,898 crores, of which the government's contribution is INR 1,577 crores.
3. **Phased Manufacturing Programme (PMP)**
- **Summary:** The GoI enhanced the differential tariff on Completely Built Units (CBUs) from 6% countervailing duty on imports and 1% excise duty on domestic manufacturing, to 12.5% and 1% respectively on March 1, 2015. Further, the government notified the PMP on 28th April, 2017. The PMP for mobile handsets and related sub-assemblies/ components manufacturing was implemented in a phased manner, with the objective of progressively increasing the domestic value addition and for establishment of a robust cellular mobile handsets manufacturing eco-system.
 - **Status:** The momentum of the PMP has begun to decline. In spite of tariff intervention, manufacturing operations of 5 assemblies/ components i.e. mechanics, die cut parts, mic and receiver, camera module, connectors could not be started. The PMP for the year 2019 for 2 assemblies i.e. display assembly, touch panel/cover glass assembly has been deferred at the request of the industry. After initially reaping the low hanging fruits such as chargers, battery pack manufacture, the PMP scheme is hitting bottlenecks (refer to Annexure A). Success of PMP would require domestic production of products covered by the subsequent parts of PMP. India is now in a phase that the more complex products selected for promotion under PMP are not easy to produce domestically. Production of the more complex verticals of the supply chain like display, PCB, core components etc. require much larger global volumes and import substitution mindset will not work. As India's export volumes move towards 600 million phones, as envisaged, the complex verticals will automatically become attractive for being produced here.
 - The Basic Customs Duty imposed on CBUs has been challenged at the WTO by the EU.
4. **Deemed Exports**
- Section 8.1 of "Foreign Trade Policy 2015-20" defines Deemed Exports as those transactions in which the goods supplied do not leave the country, and

the payment for such supplies is received either in Indian rupees or in free foreign exchange. Section 8.2(b) of “Foreign Trade Policy 2015-20” regards supply of goods to EOUs or STPs or EHTPs as deemed exports. Further Section 8.2(c) of “Foreign Trade Policy 2015-20” extends the benefits of deemed exports to license holders of EPCG Scheme to the extent of supply of capital goods. Section 8.3 (a–c) of “Foreign Trade Policy 2015-20” allow deemed exports to be eligible for benefits including advance license for intermediate supply, deemed export drawback and exemption from terminal excise duty where supplies are made against international competitive bidding. In other cases, refund of terminal excise duty will be given.¹²

5. Preference for Domestically Manufactured Goods (PMA)

The government encourages public procurement of domestically manufactured electronics through its agencies. Ministry of Information Technology and Electronics (MeitY) is the Nodal Ministry for implementation of the Electronic Products. Government E-Market Place (GeM) and National Informatics Centre Services (NISCI), the two major procurement agencies of Government of India, are expected to ensure compliance of the Electronic Products Notification in their procurement.¹³

The products notified for providing preference by MeitY include cellular mobile phones in addition to Desktop PCs; Laptop PCs; Tablet PCs; Dot Matrix Printers; Contact Smart Cards and Contactless Smart Cards; LED Products; Biometric Access Control/Authentication Devices; Biometric Finger Print Sensors; Biometric Iris Sensors; Servers.11 MeitY include cellular mobile phones in addition to Desktop PCs; Laptop PCs; Tablet PCs; Dot Matrix Printers; Contact Smart Cards and Contactless Smart Cards; LED Products; Biometric Access Control/Authentication Devices; Biometric Finger Print Sensors; Biometric Iris Sensors; Servers.¹⁴

3.3 STATE-LEVEL INCENTIVES

A number of States such as Karnataka, Andhra Pradesh, Telangana etc. have established several policies to attract investment from electronics industry, including mobile phones. A number of these incentives are over and above the incentives being offered by the GoI, such as refund of VAT/SGST, concessional land, capital subsidy, skill development/training subsidy etc. However, many of these schemes are seen by the industry to be mere promises of support made by the Government which lacks in implementation of these schemes. Uttar Pradesh, Tamil Nadu and Andhra Pradesh, house the maximum number of ESDM enterprises, emerging as key investment destinations for the sector. While all states have industrial development policies, most of them also have Electronics Policies. The incentives and other support schemes provided by selected States are shown in Table 3.1.

¹² Refer to Chapter 8 of “Foreign Trade Policy 2015-20”, n.d.

¹³ Refer to Order No. P-45021/2/2017-B.E.-II and Order No. 45021/2/2017-PP(BE-II). The orders were issued pursuant to Rule 153 (iii) of the General Financial Rules 2017 11Refer to Notification No. 33(1)/2017-IPHW dated 14.09.2017 and Notification No. (5)/2017-IPHW dated 01.08.2018

¹⁴ Refer to Section IV of “National Policy on Electronics 2012”

TABLE 3.1.
INCENTIVE POLICIES IN SELECTED STATES IN INDIA

INCENTIVE	A.P.	U.P.	TELANGANA	MAHARASHTRA	TAMIL NADU	KARNATAKA
Capital subsidy	25% or INR 250 crore maximum (30% for Mega Project)	15% or INR 5 crore maximum (Customized incentives for Mega Projects)	30% up to a maximum of 250 Crores	25% one-time capital subsidy on technology up-gradation, limited to INR 25 lakhs and on clean production methods limited to INR 5 lakhs	INR 0.3 crore to 2.25 crore basis the investment (INR 5 crore to 3000+ crore)	10% up to a max of 10 crores to registered KESDM companies
Power subsidy	20% exemption on electricity cost		Over 30% subsidy available. Subsidy of INR 2 per unit (Present rate INR 6.40 per unit) Exemption of 100% of electricity duty for a period of 10 years	(a) Eligible new ESDM units exempt from paying the electricity duty for 15 years (b) Eligible new ESDM units will be eligible for power tariff subsidy to the tune of Rs.1 per unit for a period of 3 years in category A. and B. areas and 5 years in others, subject to ceiling.	Electricity tax exemption for 2, 3, 4 and 5 years for units investing 5 crore-50 crores, 50 crores to 100 crores, 100 crores to 200 crores & 200+ crores, respectively	Applicable to registered KESDM companies set up in Karnataka and other associated industries.
Land	Rebate on land Cost	Rebate on land cost(25%)	Rebate on land cost			Rebate on land cost

INCENTIVE	A.P.	U.P.	TELANGANA	MAHARASHTRA	TAMIL NADU	KARNATAKA
Tax reimbursement	100% tax reimbursement of SGST for a period of 10 years	100% State GST reimbursement up to max of 100% of FCI (except land) for 10 years	100% of Net SGST 15 Years (Investments in Plant & Machinery, equipment, Infra)	Reimbursement for GST		
Skill upgradation	Skill upgradation training 50% reimbursement with a cap	Skill upgradation training up to 5% of fixed capital investment	Skill upgradation by provision of 75 % of training fee for training courses			
Stamp Duty exemption	Stamp duty is waived off	100% stamp duty reimbursement	100% stamp duty reimbursement on purchase and lease	Eligible units exempted from payment of stamp duty, for acquiring land and for term loan purposes	50% for categories A & B*	100% for Start-ups and MSMEs; 75% for Large and Mega Enterprises
Mega investment	Mega investment, i.e., investment greater than INR 250 crores (\$35-40 million)	Mega investment, i.e. investment greater than INR 200 crores (\$30-35 million)	Mega investment, i.e. greater than INR 200 crores (\$30-35 million) or employment of more than 1000 people	Mega investment-ESDM Units A & B: Fixed Capital; Investment greater than INR 250 crores or minimum employment of 500 people; Rest of the State: Minimum FCI of INR 100 crores or employment of 250 people	Category A (Chennai, Tiruvallur, Kancheepuram): Between INR 500-1500 crores and employment of 300 in 3 years; Category B (Other than A&C): Greater than 350-1000 crore creating employment of 200 in 3 years	Investment of more than 250 crores on fixed assets

*For a full description of the classification of Indian industry as Category A, B and C, see the Tamil Nadu Tariff Order 2019-20

CHAPTER 4/ THE WTO CHALLENGE

The USA has challenged a number of subsidy schemes of India at the WTO. These subsidy schemes are:

1. EOU Scheme including EHTP
2. MEIS
3. EPCG Scheme
4. SEZ
5. Duty free imports for exporters program

USA's contention is that these schemes provide export subsidies which are prohibited under the WTO¹⁵ regime.

The USA has claimed in its complaint that:

“It appears that India provides export subsidies through: (1) the Export Oriented Units Scheme and sector specific schemes, including Electronics Hardware Technology Parks Scheme,¹ (2) the Merchandise Exports from India Scheme, (3) the Export Promotion Capital Goods Scheme, (4) Special Economic Zones, and (5) a duty-free imports for exporters program” “Consistent with Annex VII of the SCM Agreement, India is subject to the obligations of Article 3.1(a) of the SCM Agreement because India’s gross national product per capita has reached \$1,000 per annum. Through each program, as reflected in the instruments listed above, India provides subsidies contingent upon export performance. The measures appear to be inconsistent with Article 3.1 (a) of the SCM Agreement, and India appears to have acted inconsistently with Article 3.2 of the SCM Agreement.”

The USA has referred to the notifications and relevant documents of the GoI to show the nature of schemes notified, and has claimed that they are inconsistent with Articles 3.1(a) and 3.2 of the WTO Agreement on Subsidies and Countervailing Measures Agreement (SCM Agreement).¹⁶ According to the USA, the

flexibility which India enjoyed earlier under WTO where it could provide export subsidies, is no longer available to the country.¹⁷

The WTO subsidy regime for goods such as mobile phones is specified under the SCM Agreement. Under this Agreement, subsidies are classified into the following three categories:

1. **Prohibited subsidies:** Article 3 of “Agreement on subsidies and countervailing measures” (SCM Agreement) enlists two types of subsidies that are prohibited. Article 3.1(a) prohibits subsidies which are contingent or linked to export performance (export subsidy). Article 3.1(b) prohibits subsidies which are linked to use of domestic goods in comparison to imported goods (local content subsidy). Further, Article 3.2 of SCM Agreement, which together with Article 3.1(a) is a legal basis cited by the US in this case, states: “A Member shall neither grant nor maintain subsidies referred to in paragraph 1.”
2. **Actionable subsidies:** Most subsidies used by WTO members are actionable subsidies, i.e. subsidies which could be addressed by two types of actions if they cause “adverse effects”. (Refer to Annex B for “adverse effects”) One is to bring a dispute under the WTO Dispute Settlement System. The other is to conduct a countervailing investigation against the subsidized imports, and if they are found to cause “adverse effects”, then impose a countervailing measure against them.
3. **Non-actionable subsidies:** Non-actionable subsidies are those which are not provided specifically to any enterprise or industry or to a group of enterprises or industries. The concept of specificity is defined in Article 2 of the SCM Agreement which provides the basis of determining subsidies which are either actionable or prohibited. A non-actionable subsidy is not subject to the disciplines of WTO and is therefore not a basis for adverse effects on other WTO members. Thus, it cannot be found to be in violation of the SCM Agreement.

¹⁵ Refer to WTO document, “India - Export Related Measures: Request for consultations by the United States”, 2018. Weblink: [file:///D:/MY%20DATA/Downloads/541-1%20\(3\).pdf](file:///D:/MY%20DATA/Downloads/541-1%20(3).pdf)

¹⁶ Refer to WTO document, “India - Export Related Measures: Request for consultations by the United States”, 2018.

¹⁷ This exception was provided under Annex VII of the SCM Agreement.

Only prohibited subsidies are by definition inconsistent with WTO requirements. If any subsidy is found to be prohibited under WTO, it needs to be replaced by an actionable or a non-actionable subsidy. As long as the condition which results in the subsidy being prohibited is part of the conditions for providing the subsidy, the policy measure will always be prohibited under WTO rules. Non-actionable subsidies are WTO-consistent by definition, because the subsidy disciplines under the SCM Agreement do not apply to them. Actionable subsidies are WTO-consistent if they do not cause “adverse effects”. If they are determined to be causing such effects, the subsidy can always be amended to make it WTO-consistent.

The WTO Panel has recommended that India withdraw the prohibited subsidies under DFIS within 90 days from adoption of the Report; that it withdraw the prohibited subsidies under the EOU/EHTP/BTP Schemes, EPCG Scheme, and MEIS, within 120 days from adoption of the Report; and that it withdraw the prohibited subsidies under the SEZ Scheme within 180 days from adoption of the Report.

The main characteristics of the five subsidy schemes challenged and the basis of the challenge are mentioned in the Table 4.1

TABLE 4.1
INDIA’S SUBSIDY SCHEMES CHALLENGED AT THE WTO BY THE US

GOVERNMENT SCHEME	FEATURES	COMMENT
MEIS	This is the flagship scheme of the government to promote the exports of manufactured products from India. The support under MEIS ranges from 2 to 5% of FOB value of exports, depending on the product and the country of exports. Components/sub-assemblies/assemblies and mobile handsets are entitled to receive direct export support in the form of duty credit scrips. The duty credit scrips can be used for payment of basic customs duty and additional customs duty on inputs or goods, including capital goods and for GST payable on domestically sourced inputs or goods.	The provision of duty scrips under MEIS is contingent upon export performance and therefore prohibited by Article 3.1(a) of the SCM Agreement. This is also inconsistent with Article 3.2 of the SCM Agreement. ¹⁸
EPCG	The EPCG Scheme is available to exporters of electronic products. It allows import of capital goods for pre-production, production and post-production at 0% customs duty, subject to an export obligation equivalent to 6 times of duty saved on capital goods imported under EPCG Scheme, to be fulfilled in 6 years reckoned from Authorisation issue date. The export obligation can also be fulfilled by the supply of Information Technology Agreement (ITA)-1 items to the Domestic Tariff Area (DTA), provided the realisation is in free foreign exchange.	The exemption from customs duties for the importation of capital goods under the EPCG Scheme is contingent upon export performance, and therefore prohibited by Article 3.1(a) of the SCM Agreement. This is also inconsistent with Article 3.2 of the SCM Agreement. ¹⁹

¹⁸ Refer to Section 7.542 of Chapter 7 titled “Findings” of the “Report of the Panel on India-Export Related Measures”. World Trade Organization. October 31, 2019.

¹⁹ Refer to Section 7.512 of Chapter 7 titled “Findings” of the “Report of the Panel on India-Export Related Measures”. World Trade Organization. October 31, 2019.

**GOVERNMENT
SCHEME****FEATURES****COMMENT**

Duty-free imports for exporters program

Under this programme, an exporter can import eligible goods - duty free. Past export performance entitles the enterprise to an import duty exemption. The extent of the import duty exemption is contingent upon the FOB value of exports of a given product during the previous year. In order to obtain an Export Performance Certificate, the exporter must submit an application

The exemptions from customs duties are subsidies that are contingent upon exports and therefore prohibited by Article 3.1(a) of the SCM Agreement. This is also inconsistent with Article 3.2 of the SCM Agreement.²⁰

EOU Scheme, and sector specific schemes

EOUs are allowed to procure raw material and capital goods duty free, either through import or through domestic sourcing; EOUs are eligible for reimbursement of GST; EOUs are eligible for reimbursement of duty paid on fuels procured from domestic oil companies; EOUs are eligible for claiming input tax credit on the goods and services and refund thereof; Fast track clearance facilities; Exemption from industrial licensing for manufacture of items reserved for the small scale sector

The challenged subsidies under the EOU/ EHTP/BTP Schemes are contingent upon export performance, and therefore prohibited by Article 3.1(a) of the SCM Agreement. This is also inconsistent with Article 3.2 of the SCM Agreement.²¹

²⁰ Refer to Section 7.542 of Chapter 7 titled "Findings" of the "Report of the Panel on India-Export Related Measures". World Trade Organization. October 31, 2019.

²¹ Refer to Section 7.498 of Chapter 7 titled "Findings" of the "Report of the Panel on India-Export Related Measures". World Trade Organization. October 31, 2019.

**GOVERNMENT
SCHEME****FEATURES****COMMENT**

SEZ Policy	Makes goods (including capital goods) and services available free of taxes and duties supported by integrated infrastructure for export production; Simplified procedures for development, operation, and maintenance of the SEZs and for setting up units and conducting business in SEZs; Single-window clearance for setting up of SEZs; Single-window clearance for setting up units in SEZ; Single-window clearance on matters relating to Central as well as state governments; Simplified compliance procedures and documentation with an emphasis on self-certification; Supplies of goods and services to SEZs to be treated zero rated under GST; Income Tax exemptions on a sliding scale for a total period of 15 years.	The challenged subsidies under the SEZ Scheme, namely, (a) the exemption from customs duties on imports and exports (b) the exemption from IGST on imports and (c) the deduction of export profits from the income of Units for purposes of corporate income tax, are contingent upon export performance, and therefore prohibited by Article 3.1(a) of the SCM agreement. This is also inconsistent with Article 3.2 of the SCM Agreement. ²²
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In view of these important incentive and support schemes being challenged at the WTO, alternative incentive and support schemes which are WTO compatible should be developed. For most effective and relevant alternative policies, it is essential to get the views of the industry on factors which they emphasise in this context.

²² Refer to Section 7.533 of Chapter 7 titled "Findings" of the "Report of the Panel on India-Export Related Measures". World Trade Organization. October 31, 2019.

CHAPTER 5/ SURVEY AND FINDINGS

The research for this report was done using both primary and secondary data sources. Extensive literature review was conducted to get deep insight into the domestic and global mobile manufacturing market, the global value chain of mobile manufacturing and mobile manufacturing process. The report also delved into relevant policy documents including “National Policy on Electronics 2019” and “National Policy on Electronics 2012” and other policies discussed in the foregoing chapters, e.g., the SEZ Policy. In addition, a primary survey was carried out to gather both qualitative and quantitative data on mobile manufacturing. Various instruments such as written questionnaires, face-to-face interviews and group interviews were implemented.

5.1 DETAILS OF THE SURVEY

1. **Number of respondents**
 - Number of firms surveyed: 12
 - Number of individuals interviewed: 15
 - Several discussions with Industry Association and firms that participated in the meetings of the Association
 2. **Locations visited**
 - Domestic: Delhi, Noida, Sriperembudur, Chennai
 - International: China & Vietnam
 3. **Nature of business**
 - Original Equipment Manufacturers (OEMs): 7
 - Component manufacturers: 5
 - Trade associations: 2
-

A structured written questionnaire was administered to the respondents. The questions focused on three aspects (Annexure C):

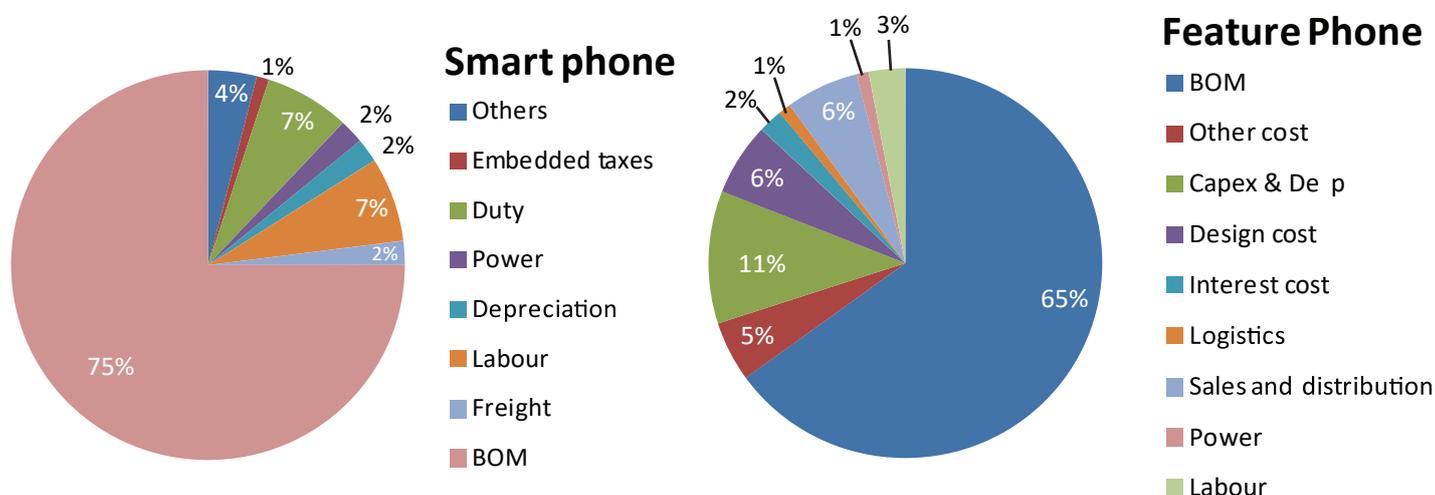
1. Understanding concerns regarding the costs and associated cost disabilities of the manufacturers;
2. Understanding concerns regarding government support schemes extended to mobile manufacturing industry and ease of availing the schemes;
3. Collating suggestions of the industry to inform recommendations pertaining to how to make the Indian mobile manufacturing globally competitive.

5.2 RESPONSE TO THE SURVEY

1. **Concerns regarding the costs and associated cost disabilities of the manufacturers**
 - (a) **Bill of Materials**
 - **Smartphones:** When costs of manufacturing a smart phone are broken down, 75% of the cost is attributable to the Bill of Materials (BoM) and remaining 25% is distributed between freight, labour, power, taxes and depreciation etc. The Printed Computer Board Assembly (PCBA) accounts for 40% of the BoM (refer to Figure 5.1). The other substantial cost components in the BoM are touch panel assembly and Liquid Crystal Display (LCD) assembly which contribute to approximately 20% of the BoM.
 - **Feature phones:** In comparison to smartphones, BoM comprises 65% of the total cost of manufacturing a feature phone. Some of the feature phones are designed in India. Designing cost contributes 6% to the manufacturing cost. Similar to smart phones, PCBA is a major cost over-head, accounting for around 50% of the BoM. (refer to Figure 5.1)
 - (b) **Cost of power:** Manufacturing electronics depends on the supply of continuous and high-quality power. For most firms in India, power supply is erratic and expensive. Despite availability of state power, companies have to install parallel power supply at considerable cost for back up. Some of the surveyed firms have built their own power supply through solar panels, in spite of which they find it impossible to connect the surplus power generated with the government grid.

FIGURE 5.1

BREAK-UP OF COST OF MANUFACTURING BOM FOR SMART PHONES AND FEATURE PHONES



(c) **Cost of labour:** The cost of labour includes wages and other costs. For example, EPF, ESI, transportation costs also have to be added to the cost of labour. On an average around 50% of wage costs are required over and above their salaries as an estimate of cost to the company. In addition, companies have to spend money on training and reskilling the labour. Since the machines for producing different phones are specific to them and costly, such training has to be provided in-house in most cases.

(d) **Cost of obsolescence:** Firms fear that their products may be outpaced with the rapidly dynamic nature of technology. In actual fact too, market conditions change every two to three years in this business.

(e) **Cost of machinery and depreciation:** It takes a company a year and a half to set up a factory. The time is required to obtain permissions and then about six months to operationalise the factory. The machines used for manufacturing phones have to be imported. The depreciation period is roughly 7-8 years. This means that the investment made on machines is rendered obsolete in less than 10 years.

2. **Concerns regarding government support schemes extended to mobile manufacturing industry and ease of availing the schemes**

(a) **Lack of manufacturing ecosystem:** India currently does not have a full-fledged ecosystem for manufacturing mobile phones. While, the PMP successfully created some capacity in production of battery packs chargers, and PCBA, the programme could not foster manufacturing in more sophisticated

products. Companies involved in manufacturing mobile phones in India are limited to assembling phones and therefore continue to import mobile phone parts and components from outside India. The imposition of duties on components and assemblies under PMP has therefore increased cost of production and proven to be counterproductive. It renders Indian manufacturers uncompetitive on global stage.

(b) **Lack of adequate export subsidies:** India's focus has been on import substitution. In the process, it has not built its own manufacturing competitiveness. This has in turn made India an export pessimist. The current incentives or schemes by the government to promote exports do not adequately address a number of constraints faced by the industry. Certain schemes do not consider all opex, capex costs into account while devising incentives. When devising such schemes, a key factor that is not borne in mind is the subsidies and incentives offered to global manufacturers in other countries.

(c) **Lack of funds:** Indian manufacturers lack access to cheap capital. The cost of capital is high compared to countries such as Vietnam and China. India needs competitive cost of capital both for capital expenditure and operational expenditure.

(d) **Lack of policy certainty and ease of business:** Companies need policy certainty to make long-term investment decisions. This requires government to give comfort to the private sector that schemes that are announced will also be administered properly and for a reasonable long period.

The M-SIPS expired on December 31, 2018. The industry's demand is that a similar scheme free from the M-SIPS shortcomings needs to be introduced on priority. The approval and disbursement of the M-SIPS was cumbersome. M-SIPS had a braking effect on projects as expenses incurred on execution of projects were ineligible for the benefits under M-SIPS.

3. **Suggestions to make Indian mobile manufacturing globally competitive**

- (a) **Create a holistic manufacturing ecosystem:** In order to become a base for manufacturing, India needs to have the entire ecosystem replete with parts, components and assemblies. This would require the government to build public infrastructure, industrial zones and labour policies that encourage manufacturing. For example, it is important that rules and regulations regarding women employees (as they are employed in large numbers on the assembly lines) are made friendlier for manufacturers to comply with. Similarly, townships that have well-equipped infrastructure for workers will give a boost to manufacturing. India should focus on developing design ecosystem to help improve design capacity.
- (b) **Encourage and incentivise exports:** Until now the focus of the mobile phone manufacturing was on import substitution. Only if India starts exporting would it be able to counter the import flow.
- (c) **Duties need to be harmonised on all parts and assemblies of the phone.** The inverted duty structure blocks valuable funds and makes the industry uncompetitive. In the event the inverted duties cannot be harmonised. The refund due to industry must be paid within 30 days automatically and should not require manual intervention.
- (d) **Incentivise large companies to set up export base in India:** The manufacturing space is dominated by 5 companies and 3 countries alone that account for 72% share by value. To build the manufacturing ecosystem ground-up, these large companies need to be incentivised to start exports from India. These large corporations or mothership companies have a large ecosystem of parts and component suppliers. Capital subsidy schemes like M-SIPS and export incentive schemes like MEIS are crucial for attracting big companies to set their base. In late 1980s and early 90s, Maruti-Suzuki became the fulcrum around which an entire ecosystem of cars, car components and assemblies was built. Similarly, in order to build the entire ecosystem of mobile manufacturing, the government will have to make it

attractive for large companies like Samsung, Apple, Huawei, Oppo, Vivo and others to export from India.

(e) **Improve policy environment and ease of doing business:**

India has improved its ranking on Ease of doing business (EoDB) index in the last couple of years. India ranked 77th in 2019 on EoDB index. However much remains to be done. There are several indicators on EoDB index where in India continues to lag. Issues related to granting of permits, enforcing contracts, registering property and starting business continue to be sore points. On several of these parameters India needs to make rampant progress.

Achieving competitiveness and export orientation requires improving the operational and support conditions both absolutely through appropriate policies, as well as in comparison to other economies that compete with India. The next Chapter addresses the latter point.

CHAPTER 6/ INDIA VERSUS COMPETING COUNTRIES

India wants to achieve a USD 5 trillion economy by 2025. Manufacturing alone is expected to contribute USD 1 trillion to the economy with another USD 1 trillion to come from agriculture and USD 3 trillion from services.²³

In order for India to realise these targets, India will need to focus on augmenting its exports. The last few years has seen India's domestic consumption slowing down as the penetration of the mobile phone has increased. Therefore, it is essential that India focuses on addressing markets beyond India where there are opportunities to sell mobile phones, both in terms of increased value and volume. This is to say that India needs to focus on markets that not only provide it the opportunity to sell more volumes of phones with lower Average Selling Price (ASP) but also address markets that buy higher ASP phones.

Currently, India sells phones with an ASP of USD 86 to primarily domestic market and export markets in UAE, Africa and Middle East. However, there are western markets like USA and Europe where phones with an ASP of USD 200 are bought. Currently, these markets are being catered to by only two countries - China (including Taiwan) and Vietnam. Also, the 5 global brands that are servicing more than 80% of the global markets include Samsung, Apple, and Huawei as the top three.

If India wants to capture the export market, then a special focus by India is required primarily on two countries and three companies. This is to say, that in order to arrive on the global stage, India needs to compete with only China and Vietnam and attract the top global manufacturers to set up their base in India.

6.1 INCENTIVES AND COMPETITIVE ADVANTAGE

China and Vietnam together accounted for about two-thirds of global exports of mobile handsets, with China alone accounting for more than half of world exports of these products. China is a much more developed economy with about 5 times the Gross Domestic Product (GDP) of India and a significantly greater ability to incentivise investment. It would be instructive to examine the support schemes in these two economies, which are acknowledged frontrunners in the area of mobile phone FDI, exports and policies adopted to establish new manufacturing operations. China and Vietnam provide their mobile phone industry several monetary, fiscal incentives and state support. This makes their mobile manufacturing industry more competitive compared to other countries including India. Both Vietnam and China have a strategic framework which is comprehensive in scope and covers all the key factors that impact investment.

1. **Good quality infrastructure and skills:** The States ensure good quality infrastructure including ports, airports, land and building (plug and play), roads as well as soft resources like good quality of power and water. The government ensures that the infrastructure is made available at low prices or is totally exempt of charges (e.g. land).
2. **Good quality labour:** The government ensures that the industry has access to high quality labour. In order for the industry to hire good quality labour, the government has invested in technical universities, provides for exemption or reduction or sharing the cost of labour training. This brings down the cost of labour and improves competitiveness of the industry.
3. **Developing the supply chain and ecosystem:** The mobile manufacturing industry depends on supporting industries and both China and Vietnam provide subsidies and facilitate supporting industries which supply material to the main industry.

²³ NITI Aayog Report titled 'Strategy for New India @75', released in November 2018.

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4. **Ease of doing business:** China ranks 46th in World Bank (WB)'s EoDB. On the other hand, Vietnam ranks 69th. Even though India has gained on the EoDB ranking in the last couple of years, it lags behind at the 77th position. China and Vietnam score over India in quick approvals for starting business, getting construction permits and registering property. Interestingly, China and Vietnam provide more focused and special ease of doing business conditions to their priority sectors and large global firms.
 5. **Stability of policy:** Policy certainty and stability is important for both medium and long term investments. In addition, it is important that Government officials have a healthy and proactive view to help the industry to take off. A helpful and facilitative approach, wherein the system and those implementing that system are keen to effectively implement the incentive and support policies creates credibility of the policy regime. The States also periodically review the incentives and facilitation schemes, as necessary. This may take place every five years, so as to combine stability of policy and change it if required.
 6. **Attracting lead firms in Global Value Chains:** Both China and Vietnam have focused on not only building their domestic production but also increasing their exports. Both the countries reached out to global lead firms and offered them lucrative incentives to get them to invest in these countries. The global lead firms are major global brands, which have the ability to place the products in most major markets of the world. Larger preferential and support policies are offered to such firms. The strategy to build local firms is also often linked to their business links with the large firms and the ecosystem generated from investment by large scale firms.
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6.1.1 FACTORS THAT AFFECT INVESTMENT AND COMPETITIVENESS

The India Cellular & Electronics Association (ICEA) has identified 10 factors that affect the investment and competitiveness of a country on the basis of a survey. According to the survey, while taking investment decisions, investors carefully assess the nature and extent of the incentives available, ease of doing business, stability and credibility of policy. The implementation of those policies, size of the market, costs of operations (especially cost and skill of labour, power, transport and quality of infrastructure at reasonable cost), and industrial relations are also important.

Table 6.1 lists the 10 factors on the basis of which investors make decisions. Investors make two kinds of assessments:

1. **Absolute evaluation:** These are the factors which, if not easily available or of good quality, makes investors averse to making investments (investment chill) or contribute to a reduction of their levels of investment (investment freeze).
 2. **Relative attractiveness:** These are factors that they weigh to make a comparison of relative attractiveness of different destinations for investment.
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TABLE 6.1**FACTORS AFFECTING COMPETITIVENESS AND INVESTMENT**

WEIGHTAGE (%)	FACTOR	AFFECTING COMPETITIVENES	AFFECTING INVESTMENT
15	TAX POLICIES AND ADMINISTRATION	Y	Y
14	ATTRACTIVENESS AND CREDIBILITY OF SPECIAL PACKAGE	Y	
14	LOGISTICS	Y	
10	MANPOWER	Y	
	- COST OF LABOUR	Y	
	- AVAILABILTY OF LABOUR	Y	
10	LEADERSHIP AND STABILITY	Y	Y
10	STATE BUREAUCRACY AND ADMINISTRATION	Y	Y
9	INFRASTRUCTURE	Y	Y
7	LAND	Y	Y
6	INDUSTRIAL RELATIONS SCENARIO	Y	
5	SOCIAL INFRASTRUCTURE	Y	

NOTE: IN VIEW OF THE IMPORTANCE OF SKILLS AS WELL AS COST OF LABOUR, THESE TWO FACTORS ARE SHOWN SEPARATELY AS WELL AS FOR THE COMPREHENSIVE CATEGORY OF "MANPOWER".

While any policy framework must keep all these factors in mind, however, those causing an investment chill/freeze are of particular importance. They include: Tax Policies and Administration, Leadership and Stability, State Bureaucracy and Administration, and Land availability. Any policy framework should give high importance to these factors, so that the investors are not dissuaded at the very beginning. In the subsequent phase of evaluation, the factors determining relative attractiveness become an important basis for policy consideration.

ICEA's survey used both absolute evaluation and relative attractiveness to compare India with competing manufacturing and export destinations China and Vietnam. Table 6.2 gives a relative assessment of India, Vietnam and China. For investments, Vietnam appears to be 1.7 times more attractive and China is about twice as attractive compared to India.

TABLE 6.2
COMPARISON OF LEVEL OF INVESTMENT ATTRACTIVENESS

WEIGHTAGE (%)	FACTOR	INDIA	VIETNAM	CHINA
100%	COMBINED PERCEPTION OF EASE OF DOING BUSINESS	1	1.58 (WA=1.78)	2.01 (WA=2.31)
15%	TAX POLICIES AND ADMINISTRATION	1	1.6	2
14%	ATTRACTIVENESS AND CREDIBILITY OF SPECIAL PACKAGE	1	2.5	4.5
14%	LOGISTICS	1	1.5	1.9
10%	MANPOWER	1	0.9	0.8
	- COST OF LABOUR	1	0.9	0.3
	- AVAILABILITY OF LABOUR	1	0.9	0.3
10%	LEADERSHIP AND STABILITY	1	1.9	1.9
10%	STATE BUREAUCRACY AND ADMINISTRATION	1	2	2.3
9%	INFRASTRUCTURE	1	2.5	3.2
7%	LAND	1	1.5	1.7
6%	INDUSTRIAL RELATIONS SCENARIO	1	1.5	1.9
5%	SOCIAL INFRASTRUCTURE	1	1.5	1.9

NOTE: THE NUMBERS IN BRACKETS ARE WEIGHTED AVERAGE. OTHER NUMBERS FOR VIETNAM AND CHINA ARE SIMPLE AVERAGES.

In addition to China, Vietnam, and other competing countries have an important common policy. They provide fiscal incentives or tax concessions and tax breaks to promote the sector. Table 6.3 illustrates international examples wherein States have granted corporate income tax break to electronics sector to promote it.

TABLE 6.3
INTERNATIONAL EXAMPLES OF CORPORATE INCOME TAX EXEMPTION

COUNTRY	DESCRIPTION OF INCOME TAX CONCESSION
Indonesia	Tax holiday from 5 to 20 years for investors in industries such as electronics and telecom.
Malaysia	Full income tax exemption for 10 years for projects of strategic and national importance (exemption for 5 years for high technology industry). Carry forward of unabsorbed capital allowances as well as accumulated losses incurred during the pioneer period.
Singapore	An approved company can be eligible for CIT exemption or concessionary tax rate for 5 or 10 years, respectively, under the Pioneer Certificate or Development and Expansion Incentive. Extension of the time period may be considered subject to a company's expansion plans.
Thailand	10 to 13 years tax holiday for core technologies development project. Up to 8-years tax exemption for targeted industries. 15 years tax holiday for new technologies and high impact investment.
Vietnam	For high-tech industry, a 4-years tax exemption from first year of profit, 5% tax rate for next 9 years, 10% tax for next 2 years, and 20% after that. Investors may also be eligible for additional tax holidays based on negotiations.

6.1.2 INCENTIVES AND COMPETITIVE ADVANTAGE

This report also examines disability for Indian mobile phone industry arising due to lack of incentives and other support policies. Disability is estimated as the reduction in cost for Indian manufacturers if the support policy in question were to be provided in India.

TABLE 6.4
DISABILITY OF INDIA VIS A VIS CHINA AND VIETNAM

FACTOR RESULTING IN COST REDUCTION	VIETNAM	CHINA	INDIA	RECOMMENDATIONS
Corporate Income Tax Exemption/Reduction	1.5-2%	2%	0.73-0.95%	Improve upon the Vietnam model: Zero tax for 10 years, and 50% CIT reduction for next 5 years. Upper limit for profit rate for CIT exemption/reduction to be 8%.
Subsidy for Machinery and Equipment	0.2%	3%	NIL (It has 1% impact on total; M-SIPS absent)	Two options, each to give same cost impact. (1) Interest subvention on cost of machinery and equipment. (2) For firms with investment above INR 500 crore, benefits covered under earlier M-SIPS to be extended.
State subsidises in India for capital investments	NA	NA	0.6-1.2%	
Cost of power	1%	1%	0%	(1) Ensure INR 5/KWH power tariff; quality of power addressed through incentives. (2) In addition, three possible schemes to improve quality of power
Interest subvention on Working Capital	1.5-2%	3-3.5%	0%	Interest subvention with loan of up to INR 100 crore without collateral.
R&D subsidy	0.4-1%	2%	0.15%	(1) Give 300% R&D cost exemption from Incomes Tax. (2) Include definition, cost of designing new products and of acquiring cutting edge technologies in R&D. Allow use of State research facilities.
Incentive for Supporting Industry	0.5-1%	0%	0%	Give incentives to supporting industries for building stronger ecosystem.

FACTOR RESULTING IN COST REDUCTION	VIETNAM	CHINA	INDIA	RECOMMENDATIONS
Exemption/reduction of land rental	0.5%	0.6%	0%	Provide same incentive as Vietnam/China.
Industrial land development support	0.5%	0.6%	0.4%	Provide same incentive as Vietnam/China (i) 50% of Land development cost was reimbursed by states and an additional 25% was reimbursed by the Centre in the EMC scheme. Mobile phone manufacturers are predominantly placed in Domestic Tariff Areas, EMC applicability for Domestic's Tariff Areas does not exist.
Building (or plug and play)	0.3%	1%	Negligible	Provide plug and play facility in industrial zones.
Labour subsidy	0.5%	2%	Negligible	Provide incentives like in Vietnam.
Logistics	0.5%	1%	0%	Improve logistics to improve ease of doing business.
Factors affecting ease of doing business	1.5-2.5%	2-3%		More focused ease of doing business.
Duty free imports for creating fixed assets, and of inputs not available domestically	0.5%		0%	
MEIS type subsidy	0%	1-2%	4% of FOB value of ex-Ports	Replace MEIS with WTO compatible subsidy of 7-8%
Total of above	9.4 - 12.5%	19.2 - 21.7%	5.88-6.7% (with 4% MEIS)	

CHAPTER 7/ RECOMMENDATIONS

The mobile handset manufacturers in India suffer on account of costs as compared to Vietnam and China (15% and 25% respectively). Vietnam and China have also been assessed as 1.7 and 2 times more attractive as investment destinations compared to India. In view of these disabilities, the following recommendations may be proposed.

1. Continuing with or modifying existing policies that are considered beneficial
2. New schemes or initiatives to offset disabilities
3. Schemes for enhancing competitiveness and ease of doing business

7.1 CONTINUING WITH/MODIFYING EXISTING POLICIES

7.1.1 NEED FOR A PRODUCTION INCENTIVE - GLOBAL FIRMS AND INDIAN CHAMPIONS

Production linked incentives to “high performers” can prove to be one of the most important and effective sources of policy intervention. Parameters can be drawn out to support firms that meet India’s national policy objectives – both global investors and Indian champions - who will build manufacturing base from India to meet domestic and global demand. Towards this end, a list of parameters which are WTO-consistent, and yet help channelize the incentives to high performing global firms are listed below:

1. Top (number of) Global firms by global sales revenue of mobile phones, avg. of 3 FY (2016-19).
2. Top (number of) Global firms by global exports revenue of mobile phones, avg. of 3 FY (2016-19).
3. Revenue benchmark for certain number of Indian firms of Indian entity of the global brand avg. of 3 years (2016-19).
4. Price benchmark for handsets FoB/ex-factory.
5. Number of employees per 100,000 phones produced in India.
6. Incremental turnover over base year (Production-linked). Will be over and above current USD 25 bn.
7. Investment criteria (only if it can be structured simply for contract manufacturers and OEMs). Investment guaranteed incase incremental turnover is a criteria.

8. All incentives to be given to manufacturers, just as MEIS. Preferably via DGFT. The government may provide these incentives for multiple businesses which includes Original Equipment Manufacturers and contract manufacturers. It must also engage with the industry to reach a simple, workable and easy to assess formulation for distribution of incentives. These parameters will have to be appropriately adjusted to suit the selection of global firms and domestic champions.

For Indian champions, the following proposals are placed for consideration:

- Incentives for domestic firms should be provided on the entire range of mobile phones.
- In addition to the incentive, select domestic companies should be provided access to capital through credit guarantee mechanisms and interest subvention of 5% on loan amount.
- Process of selection should be top two-three firms by market share in mobile business.
- A national R&D and design centre of excellence for mobile design should be created in partnership and leadership of the industry and an interest free capital of INR 200 crore should be provided on returnable basis in the seven years.
- Companies with R&D should lead the Centre of Excellence for mobile design.
- Additional incentive should be given for design led manufacturing in India.

7.1.2 REPLACEMENT FOR MERCHANDISE EXPORTS FROM INDIA SCHEME

The Government has announced a policy to provide remission of duties and taxes on exports (RoDTEP). This would replace ROSCTL. The Directorate General of Foreign Trade (DGFT) had begun to refund central and state indirect taxes and levies on exports of textiles and clothing (ROSC TL), other than those already covered under GST and Duty Drawback or similar schemes. The recent announcement by the Government claims that the amount is likely to be more than that for MEIS. In this context, it is noteworthy that with ROSCTL, all indirect taxes would have been refunded to exports. MEIS is provided over and above the refund of indirect taxes; refund of direct tax on exports would be WTO-inconsistent. Further, the estimated ROSCTL levels for textiles and clothing are less than the MEIS for made-ups and garments. Therefore, for RoDTEP to result in an overall support level which exceeds the present situation, additional incentive schemes may be required, to help achieve the objectives specified in NPE 2019.

7.1.3 NEED FOR A REVISED M-SIPS SCHEME

In keeping with the practice followed by India's major competitors, India must continue with a revised M-SIPS. A revised version of M-SIPS may be along the following lines:

1. Apart from capital subsidies, an alternative channel of interest subvention could be used to bring down the cost of capital for small units.
2. Firms investing in the sector can avail themselves either of capital subsidy or interest subvention, subject to the conditions mentioned below.
3. The interest subvention scheme should be restricted to firms, which are raising a major part of their capital from domestic sources and should be applicable to the interest being paid to domestic financial institutions.
 1. The capital subsidy should be available to firms, making an investment of more than Rs. 500 crores at X% of investment. X% should not exceed the equivalent benefit obtained through the use of the interest subvention scheme.
 2. The date from which a project becomes eligible, if approved, would be the date of acknowledgement of the receipt of an application.
 3. There should be closer coordination between MeitY and the Ministry of Finance (MoF) for the allocation of sufficient funds, so that there is no standstill in the disbursement of subsidies at any stage.
 4. Approval and disbursement of the subsidies should be done, at arms length from MeitY by reputed firms/banks.

7.1.4 REVAMP ELECTRONICS MANUFACTURING CLUSTERS

A revamped EMC has the potential to provide land with fully developed infrastructure to investors provided the central government and the concerned state government take fast track action to build the infrastructure and provide the necessary clearances for setting up a manufacturing unit in a time bound manner. It can prove to be extremely useful if a certain percentage of the land is also built up so as to provide plug and play facilities to investors. However, this would require a strong pro-active approach and intensive two-way interaction with potential investors so that financial closure can be achieved for preparing the land for factories, or to build the plug and play facilities quickly. In this context, the States could decide the extent to which they would subsidise the provision of land, announcing their policies in advance and covering

a period of at least 10 to 15 years. Thus, the central government needs to get the state governments to buy into the EMC in a much more committed manner so as to get the clusters off the ground much faster. Further, since proximity to the port or airport is very important part of ease of doing business, it would be useful to combine such clusters with ongoing schemes such as the Sagarmala Project or the Coastal Economic Zones. Alternatively, they could also be linked with nodal points near a port/airport on one of the Freight Corridors. The unutilised land available in private SEZs could be utilised for this purpose after following an accelerated debonding process on the lines suggested by the Baba Kalyani Committee.

NITI Aayog has successfully built a draft Lithium Ion policy, India should swiftly move on building similar incentive policies for Open Cell and Semi conductor ATMP. These incentive schemes along with higher exports needs to replace PMP. This strategy is only suggested for mobile phones since domestic manufacturing has now exceeded domestic demand. For other verticals in the electronics sector, the government may wish to pursue a sector appropriate policy.

7.1.5 RECALIBRATE THE PHASED MANUFACTURING PROGRAMME

Industry feedback suggests that instead of tariffs, the Government should use incentives to promote indigenisation over a period longer than currently envisaged under the PMP. This would enable production to move to sophisticated sub-assemblies/assemblies, by attracting large investments and scale of operations through global lead firms. These firms would function as coordinators of the different parts of the value chain, bring large parts of their own ecosystem, and have the ability to place the products manufactured in India in most of the large affluent markets of the world.

4. The date from which investment flows will be reckoned as being eligible for the benefit could be set say as 1 April 2016/2017/2018, so that firms which have already started investing, get treated the same as new investors.
5. The suppliers/vendors, who are part of the ecosystem developed by the lead firm, may also get the same corporate income tax benefits as the former, provided these suppliers/vendors supply a major part (50% or above) of their output to the mega-firm.

7.2 NEW SCHEMES/INITIATIVES FOR THE INDUSTRY

7.2.1 EXEMPT/REDUCE CORPORATE INCOME TAX

India's high tax rates, including its effective tax on corporate profits, has hindered the attraction of investment in India. The Government has recently reduced the tax rate applicable to industry, with a significant reduction for new investment. This is a welcome step. It should incentivise investment and production.

For certain priority areas where the Government has major ambition for investment and exports, the Government could consider providing additional incentives, taking account of the corporate tax exemption/reduction scheme for high technology firms in Vietnam. Based on that, the following tax incentives could be considered for mega-firms which bring in large investments (say above INR 500 crore or 1,000 crore):

1. Zero tax for the first 10 years (after the commencement of operations or till the firm starts making profits)
2. 50% of the applicable tax for the next 5 years
3. Carry forward the losses till the firm starts making profits, to be set off against the profits made subsequently, for purposes of tax calculation. (existing clause, losses can be carried forward for 8 years).

7.2.2 REFUND OF STATE AND CENTRAL TAXES AND LEVIES

Under WTO's SCM Agreement, indirect taxes and levies on inputs into exports can be refunded, and these will not be treated as a subsidy. While there is a duty drawback scheme to provide such refunds, this does not include all the relevant taxes and levies at the State and the Central level. These refunds can be provided, based on the calculations made by the Committee established to ascertain duty drawback rates. Refund of such indirect taxes has begun for textiles and clothing (i.e. made-ups and garments). A similar refund scheme could be implemented also for electronics, including mobile handsets. Estimates suggest that this may be around 1% of cost.

7.2.3 CREDIT GUARANTEE SCHEME

MeitY has successfully spearheaded a credit guarantee scheme for credit upto INR 100 crore. This would enable SMEs and MSMEs. However, to build Indian champions, an enhanced scheme for select 3-4 companies upto INR 2,000 crore in a graded manner should be built on top of these.

Further, there should be duty free import of machinery and equipment and other inputs (not domestically available) for making fixed assets of factory (Including second hand machinery and equipment). This proposal mirrors Vietnam's position of duty free imports. It is also recommended that in view of the constant upgradation of technology and design of new machinery, we need to keep upgrading our list of capital goods, which are eligible for zero duty treatment. The Annual Budget for 2019-20 has extended the zero duty facility to more capital goods required by the industry.

7.3 SCHEMES FOR ENHANCING COMPETITIVENESS AND EASE OF DOING BUSINESS

7.3.1 EASIER ALLOTMENT OF LAND AND BUILT UP PLUG AND PLAY FACILITIES

In India, land allotment can be speeded up enormously by utilising vacant plots/factories in many of the Private and State SEZs (estimated at over 22,000 hectares) / State Industrial Parks. In this context the recommendations of the Baba Kalyani Committee to convert the manufacturing SEZs into Employment and Economic Enclaves, which will free up a lot of unutilised land in the private/state SEZs and enable all categories of investors, not just exporters, to utilise world class infrastructure and to leverage the domestic demand leading to employment generation and eventually to increased exports, deserves to be taken up on priority basis by the government. Though many state governments are exempting land registration deeds from payment of stamp duty, if this practice is adopted by all states, it could reduce the costs for investors to a certain extent.

7.3.2 SUPPLY OF UNINTERRUPTED, HIGH QUALITY, COST COMPETITIVE POWER

It is recommended that there should be provision of uninterrupted and high quality power to manufacturing units located in a cluster, by seeking an appropriate and cost-effective technical solutions.

1. Option 1: To draw a dedicated line from a high tension transmission line (33 KVA or 132 KVA generally) to a substation in a manufacturing cluster and to supply power to the units from this substation. The cost of drawing the line and building of the substation should be part of the infrastructure of the EMC/Industrial Park/SPV and should not be passed on to the consuming units. It is also essential to ensure that requisite permissions are granted in a time bound manner to use captive solar power and allow the surplus power to be supplied in the grid when it is not required by the unit.
2. Option 2: The state governments can help by putting in place a mechanism for time bound disposal of permissions to use Open Access power (as long as it is >1 MW for a cluster) from any power supplier and charging surcharge at discounted rates. At present, the full surcharge can make this option expensive, and close the option for using this solution.
3. Option 3: The state government can allow the EMC/Industrial Park/SPV to take a Distribution Company licence and supply power directly to the manufacturing units.

7.3.3 EASE OF DOING BUSINESS AND SINGLE WINDOW CLEARANCE

There must be special focus must be on the following:

1. Resolution of local issues through a single window mechanism in order to prevent any running around by an investor to various agencies to seek necessary clearances before commencing operations.
2. Reduce the delay in getting approvals including environmental clearances for starting operations.
3. Simplifying the documentation and information requirements.
4. Fast track Customs clearance of imports and exports
5. Ensuring there is no delay in transportation (poor roads, port facilities, hold ups at checkpoints etc.)
6. Guaranteed water supply
7. Speedy resolution of commercial and labour related disputes

7.3.4 SUPPORT PROVIDED FOR TRAINING, HOUSING, R&D

The following recommendations are proposed:

1. The training of potential workers in a cluster should be dovetailed with the Skill India Mission institutions as closely as possible. Ideally the training institution catering to the needs of a cluster should have curricula designed by the industry itself so that the on-the-job training period could be reduced.
2. Government should subsidise the training costs incurred on a worker by providing one and a half month's wages to a manufacturer in the form of an Employee Provident Fund (EPFO) scrip linked to the worker.
3. To construct dormitories for the workers as a part of the infrastructure development in the cluster, which could then be managed by an association of employers.
4. To facilitate bank finance to landowners in nearby villages to build dormitory style accommodation, for instance like those prevalent in Tirupur for the knitwear industry workers.
5. 300% of Design, innovation and R&D costs should together be eligible for exemption from corporate tax. Revised definition of scientific activity should also include the cost of prototypes and introduction of new products.
6. Policies should be implemented in consultation with industry to help create common facilities, and develop schemes and opportunities to share research facilities.
7. To develop design capabilities through training, information portals, platforms for interaction between design specialists and others, and developing information base on employment opportunities for design specialists.

7.3.5 CHALLENGES RELATED TO GST

1. Inverted Duty structure anomaly needs to be corrected - GST of 12% recommended on the entire list of Parts Universe as per the PMP roadmap. The GST applicable on inputs/ components/ sub-assemblies/ accessories of mobile handsets should not be more than that of the GST applicable on the final/ end product, which is the mobile handset.
2. Time Consuming and Tedious Refund Mechanism needs to be addressed - Time limits on refunds should be reduced and deadlines should be adhered to with firmness, as has been the case for exports. Ideally refunds should be granted immediately or at most within seven days. Auto-reconciliation should be allowed so that the refunds can be processed seamlessly without manual intervention.
3. Refunds of accumulated ITC on Capital goods and services, should be allowed. This will help remove the cash flow blockage in the industry.

7.3.6 STANDARD ESSENTIAL PATENTS

The concerned officials in the Controller General of Patents, Designs and Trademarks, Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry (MoCI) need to be sensitised about the legal nuances of Section 3(k) of the Patents Act. An important reform to ensure that royalty is rightly paid on the Smallest Saleable Patentable Unit (SSPU) on which the technology applies and not on the final product, should be implemented immediately.

7.3.7 IMPROVING TIMELINESS AND CREDIBILITY OF POLICY REGIME, USING A FACILITATIVE APPROACH

Mechanisms will have to be developed within the system which allow monitoring the implementation of policies (through an MIS system) and addressing the issues which are delayed, through a combination of two institutions. One, a High-Level Co-ordination Committee to address any problems arising due to lack of co-ordination of two or more agencies, including for administrative or procedural issues. Second, an Appeal Board or a Tribunal with the power to take fast-track decisions to pronounce on issues which are delayed due to lack of legal clarity, or inconsistent decisions taken by two branches of the administration.

CONCLUSION

India's domestic mobile market is currently to the tune of USD 25 billion with exports amounting to USD 1.6 billion. This translates to a mere 0.5% share of the global exports market of USD 283 billion. The mobile export market is currently being served by two countries namely China and Vietnam. The trade issues between China and USA have created an opportunity for some of the largest mobile manufacturing companies and their ecosystems to consider shifting their manufacturing out of China. India should aim to increase scale and tap the export market. Increased exports will lead to increase in foreign exchange flow into the country. This would ensure a significant contribution to India's GDP.

Even though India has the potential to serve the export market but due to various disabilities including cost of production, lack of matching incentives, logistics, infrastructural and procedural deficiencies, mobile manufacturing companies consider India as less attractive compared to Vietnam and China. Vietnam is considered 1.7 times and China twice more attractive than India.

In order for India to compete with Vietnam and China, India needs to address these disabilities. However, this will take time, therefore India will need to provide incentives to offset these disabilities. These incentives cannot merely equal what Vietnam and China are offering. These incentives have to be better than the incentives provided by both countries or at least those that are being provided by Vietnam. Setting up manufacturing in a country is a long-term decision which involves huge capital infusion, therefore, unless there is a significant cost advantage, the manufacturing companies will not have any incentive to shift their manufacturing facilities to India. It may also be noted that the facilities in India will be a combination of small number of new facilities and large number of facilities that will shift from existing destinations. The shifting process and consideration is even more difficult. Shifting requires a very detailed calculation of cost, incentives and long term policy stability which will safeguard the investment. Finally, countries like China are acutely aware of such pressures and therefore they are willing to do more than earlier to retain high tech investments which are labour intensive, high value and

have massive future growth potential. The threat to these companies from the trade fight between US and China is from US tariffs, not from the Chinese or Vietnamese administration which is why the comparison will always be made to the operating environment in Vietnam or China. In fact, China and Vietnam will make a deeper effort to retain these companies both by improving the environment and striking special deals.

Currently, by comparison it is not attractive to manufacture in India primarily because there are disabilities on one hand and on the other there are no matching incentives to export from the country. Earlier, large manufacturing companies which committed to investing Rs. 1 crore to Rs. 5,000 crore were entitled to 20-25% capital subsidy under M-SIPs. However, this scheme ended on December 31, 2018 and has not been replaced by any equivalent scheme. On one hand, M-SIPs has ended, on the other, export-linked incentives like MEIS are under WTO contention. MEIS provided 4 percent incentive to mobile exporters and component manufacturers such as manufacturers of chargers, batteries and headsets received an incentive of 2 percent. In light of the WTO dispute, it is likely that MEIS will be phased out soon.

This report has calculated the disabilities of India vis a vis Vietnam and China. Disability is a quantitative estimation of reduction in cost for Indian manufacturers if a comparable policy support were provided in India. This report estimated that the policy support in Vietnam renders India uncompetitive by 10-12% and the disability of India compared to China lies between 19-23%. It is important to note that this disability is not on account of industry or any aspect relating to machinery, equipment or technology. The disability is purely on account of infrastructure, policy and fiscal incentives - factors that are entirely in the control of the government and significantly the central government. In fact, the private sector is equally efficient regardless of the destination in terms of factors of production.

The government has constituted a committee under the chairmanship of CEO, NITI Aayog to create an enabling policy framework 'to identify disability vis-à-vis other potential investment destinations, opportunity arising

out of trade dispute and possible fiscal and non-fiscal interventions compliant with the WTO mandate'. Recently, the Ministry of Finance (MoF) has taken some measures to address some of the disabilities. The Honourable Finance Minister Nirmala Sitharaman recently reduced the Corporate Income Tax for new manufacturing companies to 25.17%. Moreover, the impact of reduction in corporate income tax will be to the tune of mere 1% in general terms. However, where China and Vietnam are concerned, there are sufficient examples that they are willing to offer "negotiated" CIT or "zero" CIT for multiple years since they are looking to negotiate with only two or three companies in this space. Therefore, the impact of this announcement in effect in the handset and component sector will be in the range of 0.3-0.5 percent at best.

In addition to the corporate income tax, MEIS has been replaced by another scheme called Remission of Duties and Taxes on Exports (RODTEP). The MoF has allocated a sum of Rs. 50,000 crore towards RoDTEP.²⁴ The handset industry will have a legitimate claim to this, however it remains to be seen whether RoDTEP will be in the same range as MEIS for handsets and component manufacturers.

These measures are not sufficient to address the disabilities of India's manufacturing. In light of the existing disabilities coupled with withdrawal of both M-SIPs and MEIS, the government must consider an incentive which is a combination of:

Corporate Income Tax + RODTEP + Production Subsidy + Others²⁵

In order for the incentive to be consistent with the WTO, the government must ensure that the incentive neither subsidises export nor promotes localisation of content. The export incentive can however be linked to:

- i) production/turnover over a fixed base year; or
- ii) FoB price of the mobile phone; or
- iii) jobs created per 100,000 phones

Factors such as investments were considered but not included in the recommendation for the following three reasons:

- i) The definition of investments is difficult to establish and varies from OEM producers to contract manufacturers.

- ii) It becomes difficult to assess especially in the case of large factories that sometimes manufacture for more than one brand.

- iii) If production/turnover linked incentive is established with a minimum price of the mobile phone, it will automatically lead to new investments.

The government must provide these incentives for multiple business which includes OEMs and contract manufacturers. It must also engage with the industry to reach a simple, workable and easy to assess formulation for distribution of incentives.

Finally, the government must ensure that the incentive formulation is expedited. It is crucial that MEIS support is not discontinued under any circumstance before introduction of an alternative. A seamless transition from MEIS regime to the new regime will ensure that investment decisions are taken without policy uncertainty. There is clear evidence that the mobile handset sector has performed exceedingly well (800% growth in exports) after the increase of MEIS from 2 to 4%. If the policy support of both the M-SIPs and MEIS are taken away, exports are sure to collapse. The much touted "Make in India" story needs the government to step up and provide incentives to the mobile manufacturing sector to leverage the manufacturing and trade global winds without any disruption.

²⁴ Presentation on Measures to Boost Economic Growth. Ministry of Finance, Government of India. September 14, 2019.

²⁵ Others can include reimbursement of costs on account of logistics, creating plug and play facilities, improving ease of doing business and providing single window clearance.

ANNEXURES

A) PHASED MANUFACTURING PROGRAM (PMP) ON MOBILE PHONES – PROGRESS AND CHALLENGES

YEAR/ PRODUCTS	INTERNAL RATINGS*	REMARKS
2015		
APTP	9	CBU import is drastically down. Grey market has kicked-in in the higher end
Gift Box	10	Almost complete localization
2016		
Charger/ Adaptor	7	Many brands still import; more aggressive outreach required
Battery Pack	5	Progressing rapidly
Wired Headset	4	Substantial work yet to be done
2017		
Die Cut parts	0	Many factors
Mic and Receiver	1	ASEAN imports major threat
Mechanics	2	Many factors
Keypad	3	Many factors
USB Cable	7	Good progress
2018		
PCBA	5	Good progress except in case of Feature phone
Camera Module	1	One plant is coming up; long way to go.
Connectors	1	Long way to go
2019		
LCD Assembly	1	Work-in-Progress
Vibrator Motor	0	Work-in-Progress
Touch Panel	0	Work-in-Progress

YEAR/ PRODUCTS	INTERNAL RATINGS*	REMARKS
2020 ONWARDS		
PCB- Mobile phone		
Semiconductor ATMP		
Active Components (Diodes, Transistors, LEDs etc.)		There is NIL progress in this and there is no strategy for the same.
Passive Components (Capacitors, Resistors, Inductors etc.)		

Source: ICEA

* Ratings on a scale of 0-10

B/ ARTICLE 5 OF SCM AGREEMENT

According to Article 5 of “Agreement on subsidies and countervailing measures”

No Member should cause, through the use of any subsidy referred to in paragraphs 1 and 2 of Article 1 of “Agreement on subsidies and countervailing measures”, adverse effects to the interests of other Members, i.e.:

1. injury to the domestic industry of another Member;²⁶
2. nullification or impairment of benefits accruing directly or indirectly to other Members under GATT 1994 in particular the benefits of concessions bound under Article II of GATT 1994;²⁷
3. serious prejudice to the interests of another Member.²⁸

This Article does not apply to subsidies maintained on agricultural products as provided in Article 13 of the Agreement on Agriculture.²⁹

C/ SURVEY QUESTIONNAIRE

1. What is your firm’s turnover and employment?
2. What is the proportion of exports in your total output?
3. What is the breakdown of main items of costs in terms of percentages, e.g. raw materials, labour, power, and other costs? Of this how much is embedded taxes?
4. What are the subsidies available to you in addition to the duty drawback scheme?
5. What is the breakdown of the total subsidy disbursed under various schemes to you in the last year:

- (a) Subsidy disbursed under MEIS;
 - (b) Subsidy disbursed under the EHTP Scheme;
 - (c) Subsidy disbursed under the EPCG Scheme;
 - (d) Subsidy disbursed under the SEZ;
 - (e) Subsidy disbursed to electronics under duty-free imports for exporters program;
 - (f) Any other?
6. What is the level of employment both direct and indirect in your firm? Would it be possible for you to give me the number of females-males, fixed terms, overtime etc.
 7. What are the wages paid, regular and over time? Apart from wages what are the extra costs?
 8. What is the Capital and interest cost that you incur annually?
 9. What is the depreciation period of your machines?
 10. What is the payoff period of your machines?
 11. How do you feel you are disadvantaged vis a vis other competing countries?
 12. What do you think will improve your competitiveness?
 13. What are the major areas where you think you need government support?
 14. What are the forms of government subsidies that you have found easiest to access? Which available subsidies do you not use? Are they difficult to use?
 15. What are the problems that you have encountered in claiming various subsidies.

Other questions will arise in the course of our interaction with the exporting firms.

²⁶ The term “injury to the domestic industry” is used here in the same sense as it is used in Part V of the SCM Agreement.

²⁷ The term “nullification or impairment” is used in this Agreement in the same sense as it is used in the relevant provisions of GATT 1994, and the existence of such nullification or impairment shall be established in accordance with the practice of application of these provisions.

²⁸ The term “serious prejudice to the interests of another Member” is used in this Agreement in the same sense as it is used in paragraph 1 of Article XVI of GATT 1994, and includes threat of serious prejudice.

²⁹ Article 5 of “Agreement on subsidies and countervailing measures”, n.d.

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