

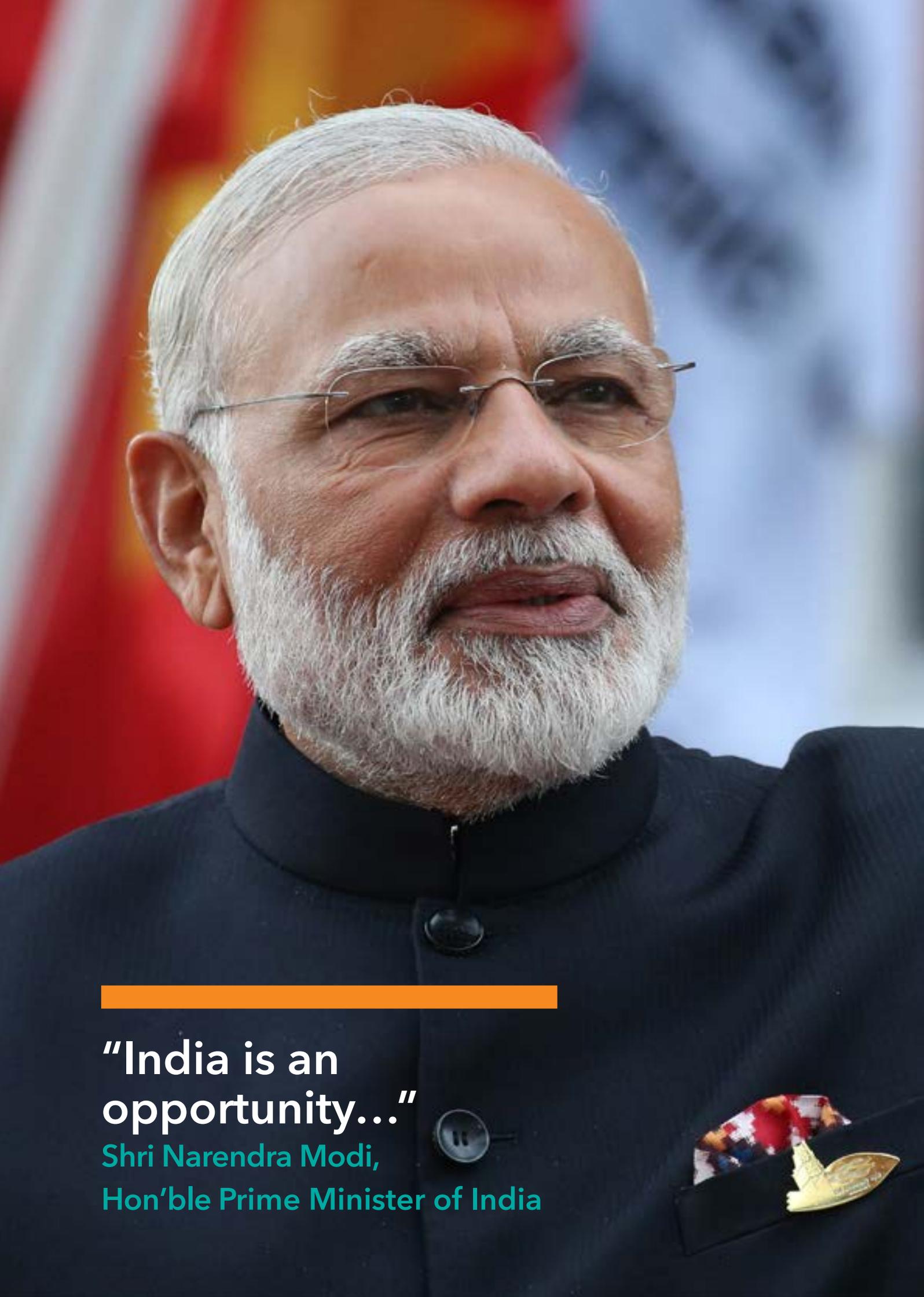


ICEA

INDIA CELLULAR
AND ELECTRONICS
ASSOCIATION

**Making India
the global
manufacturing
powerhouse
for mobile
handsets and
components**





**“India is an
opportunity...”**

**Shri Narendra Modi,
Hon'ble Prime Minister of India**

**“We must dream of
Made in India products
around the world...”**

**Shri Narendra Modi,
Hon’ble Prime Minister of India**

**“Manufacturing
boost will create
jobs, increase
purchasing power,
thereby creating
larger market for
manufacturers...”**

**Shri Narendra Modi,
Hon’ble Prime Minister of India**



Making India the global manufacturing powerhouse for mobile handsets and components: Analysis of PMP impact and charting the way forward

The conclusions and recommendations of this report are solely those of ICEA. The report draws on multiple sources of input, including economic analysis from McKinsey & Company, interviews with industry and government experts, perspectives from ICEA member organizations and data from publicly available data sources (IDC, Strategy Analytics, IHS, Capital IQ).

रविशंकर प्रसाद
RAVI SHANKAR PRASAD



मंत्री
विधि एवं न्याय
और
इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी
भारत सरकार
MINISTER OF
LAW & JUSTICE
and
ELECTRONICS & IT
GOVERNMENT OF INDIA

FOREWORD

At the outset, I wish to compliment Indian Cellular Association (ICA) for undertaking the Impact Analysis of the Phased Manufacturing Programme (PMP) in partnership with the McKinsey titled 'Making India the global manufacturing powerhouse for mobile handsets and components'.

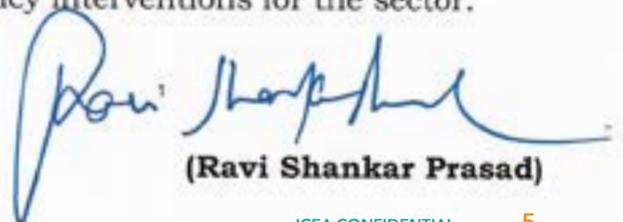
I am happy to note that significant growth in the manufacturing has been witnessed in the cellular mobile handsets and parts/components manufacturing sector during the past 3-4 years. Several initiatives undertaken under the "Make in India" Programme of the Government under the leadership of Hon'ble Prime Minister, Shri Narendra Modi, have played an important role in the rapid growth of cellular mobile handsets eco-system in the country. The PMP notified by the Ministry of Electronics and Information Technology is one of the important initiatives undertaken by the Government for the promotion of indigenous manufacturing of cellular mobile handsets and parts/components thereof.

As a result of these initiatives, about 120 manufacturing units have been set up across States during the past 3-4 years and these have generated employment for about 4.5 lakh persons (direct & indirect). Needless to say that cellular mobile handset manufacturing has emerged as the champion category under the "Make in India" initiative of the Government.

I am confident that based on various interventions being taken by the Government, cellular mobile handsets and parts/components manufacturing activity will continue to grow and will aid in making robust eco-system of electronics hardware manufacturing in the country, thereby contributing towards fulfilling the Government's vision under the "Make in India", "Skill India", "Electronics India" and "Digital India", programmes.

The ICA-McKinsey Report, with its analysis of the impact of the PMP along with key trends of this sector, assessment of opportunities for India and major challenges being faced by the sector, and strategy for making India the global manufacturing powerhouse for mobile handsets and components, will be of immense value in formulating suitable policy interventions for the sector.

My best wishes to ICA.


(Ravi Shankar Prasad)

सुरेश प्रभु
SURESH PRABHU



मंत्री
वाणिज्य एवं उद्योग;
एवं
नागर विमानन मंत्रालय
भारत सरकार, नई दिल्ली
MINISTER
COMMERCE & INDUSTRY;
and
CIVIL AVIATION
GOVERNMENT OF INDIA, NEW DELHI

FOREWORD

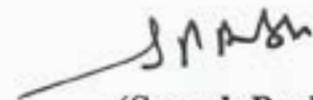
I am very happy to note that the Indian Cellular Association (ICA) along with McKinsey has come out with this Report - "*Making India – The Global Manufacturing Power House for Mobile Handsets & Components*" as an impact analysis report.

The Indian mobile phone manufacturing sector has seen tremendous growth during the recent past. It has paved the way for establishment of new manufacturing units generating significant employment. There is enormous potential of export of 'Made in India' mobile phones, which can further propel the manufacturing growth. The Government of India has been promoting this sector through appropriate policy interventions during the past 3-4 years. In order to promote the exports, the Government is already providing MEIS of 4% on mobile handsets and various components.

I am sure, the study has factored all aspects related to manufacturing growth and further interventions required by the Government to improve manufacturing competitiveness with a major focus on enhancing exports.

The Government no doubt will take up these recommendations seriously and deliberate on various corrective measures which may be required through appropriate policy interventions as deemed appropriate in the interest of this sector.

I hope, the Report will assist in formulation of policies/frameworks and the prospects recognized from this Report will help India become a "Global Manufacturing HUB for Mobile Handsets and Components".


(Suresh Prabhu)



सत्यमेव जयते

मनोज सिन्हा
MANOJ SINHA

संचार राज्य मंत्री (स्वतंत्र प्रभार)

एवं

रेल राज्य मंत्री, भारत सरकार

Minister of State (Independent Charge)
for Communications

and

Minister of State for Railways
Government of India



FOREWORD

Mobile handsets and components have emerged as the champion category under the Make in India initiative of the Government. Ever since the new Government at the Centre assumed charge under the leadership of the Hon'ble Prime Minister Shri Narendra Modi, our major focus has been developing the manufacturing eco-system related to mobile handsets and components.

The spurt in manufacturing activity during the past 3-4 years, with the establishment of 120 new manufacturing units and the creation of 4.5 lakh jobs, is a major testament to the resurgent manufacturing activity witnessed in this sector.

I am very happy to learn that ICA, in partnership with McKinsey, has conducted an impact analysis study covering the impact of the current policy interventions of the Government. ICA has been playing an important role in the development of this industry, with strong commitment for expanding manufacturing operations, enhancing value addition, and generating employment.

I am quite sure that the impact analysis study under the ICA – McKinsey report "MAKING INDIA – THE GLOBAL MANUFACTURING POWER HOUSE FOR MOBILE HANDSETS & COMPONENTS" will go a long way in improving India's competitiveness and become a reference document for the Government to adopt necessary measures to benefit the industry and the economy.

Manoj Sinha
(MANOJ SINHA)

Rita Teotia, IAS



सत्यमेव जयते

वाणिज्य सचिव
भारत सरकार
नई दिल्ली-110011
COMMERCE SECRETARY
GOVERNMENT OF INDIA
NEW DELHI-110011

MESSAGE

I am happy to learn that Indian Cellular Association (ICA) along with McKinsey have undertaken a study titled "Making India –The Global Manufacturing Power House for Mobile Handsets and Components".

Expanding manufacturing operations, enhancing exports and value addition are very high on the priority of the Government and the focus is on generating domestic employment through value addition. The Phased Manufacturing Programme (PMP) aimed at promoting domestic value addition in a calibrated manner has achieved some success in the last few years in terms of domestic value addition in manufacture of cellular handsets.

While growth in manufacturing is largely being driven by our huge demand/market, we must also promote competitive manufacturing to boost our exports of electronics and telecom equipments. The importance of investments in R&D for sustained competitiveness can hardly be overemphasized.

We look forward to further inputs from the Industry on specific measures required to promote exports of electronics/telecom items.

My best wishes to ICA in their endeavour to provide evidence based suggestions for policy formulation in the Electronics space.

[Rita Teotia]

New Delhi
14 May 2018

अरुणा सुंदरराजन, आई.ए.एस
सचिव
Aruna Sundararajan, I.A.S.
Secretary



भारत सरकार
संचार मंत्रालय
दूरसंचार विभाग
Government of India
Ministry of Communications
Department of Telecommunications



10th May, 2018

FOREWORD

I am happy to note that ICA in partnership with McKinsey have conducted an impact analysis study "Making India - The Global Manufacturing power house for Mobile Handsets & Components".

The manufacturing activity related to mobile handsets and components has registered an unprecedented growth during the past 3-4 years riding on the Make in India initiative of the Government. Approx. 120 new manufacturing units have been set up so far generating employment for 4.5 lakhs.

I strongly believe that the current manufacturing growth witnessed in this sector is just the beginning of a massive transformational journey ahead, which can potentially produce far better results in export promotion, employment generation, enhance in forex savings and a host lot of other socio – economic advantages.

The Phased Manufacturing Program (PMP) which has already been notified by the MeitY and is being implemented in phases is no doubt a well calibrated strategy to widen and deepen the components manufacturing eco-system with manifold benefits such as to enhance value addition, boost production and generate employment.

I am confident that the impact analysis study done by ICA along with McKinsey has already come up with various strategic recommendations which should be considered very seriously keeping in view to protect and promote the manufacturing interests of the nation. Some of the major gaps which I understand the study has tried to address and provide recommendations on are how to enhance exports, generate employment, setting up of components manufacturing eco-system, setting up of Design eco-system, and other important recommendations with the objective to establish India the global mobile manufacturing hub.

I acknowledge and appreciate contributions of ICA for conducting this study. I am confident that the report will throw more insights into specific aspects/ challenges that the manufacturing sector is encountering in India and provide appropriate recommendations to overcome these challenges.


(Aruna Sundararajan)



अजय साहनी, आई.ए.एस.
AJAY SAWHNEY, I.A.S.



सचिव
इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी मंत्रालय
भारत सरकार
Secretary
**Ministry of Electronics &
Information Technology (MeitY)**
Government of India

FOREWORD

At the outset, I wish to compliment Indian Cellular Association (ICA) for a very timely and important initiative of undertaking an Impact Analysis Study on "Making India the global manufacturing powerhouse for mobile handsets and components", in partnership with McKinsey.

The manufacturing eco-system for cellular mobile handsets and their parts/ components has undergone a major transformation in India during the past 3-4 years. During this period, about 120 manufacturing units for cellular mobile handsets and their parts/ components have been set up in the country, which have generated employment for about 4.5 lakh persons (direct and indirect).

The Phased Manufacturing Programme (PMP) of Ministry of Electronics and Information Technology, for the promotion of indigenous manufacturing of cellular mobile handsets and parts/components thereof, has worked well so far, catalyzing sub-assemblies/ components manufacturing activity. We are confident that the PMP's objective of substantially increasing the domestic value addition and achieving a robust cellular mobile handsets manufacturing eco-system in India will be met.

Phenomenal growth in the manufacturing of mobile handsets and parts/ components thereof is being witnessed in the country. While the current manufacturing growth is catering to the requirements of the domestic market, the industry must now address the global market opportunities as well, by focussing on exports. Early success in assembling mobile phones and accessories needs to pave the way for a wider array of devices and electronic products being manufactured in India and for more and more of these to be conceived, designed and manufactured in India.

The ICA - McKinsey Report has captured the key trends of this sector, opportunities for India and the major challenges being faced by the sector and has also suggested measures for improving manufacturing competitiveness, enhancing ease of doing business and interventions related to enhancement of exports, etc. The comprehensive study will enrich the current knowledge base of key stakeholders and will help develop and formulate appropriate policy interventions for electronics manufacturing to grow in the country.


(Ajay Sawhney)

Dated: 14th May, 2018



Pankaj Mohindroo

Chairman, Indian Cellular and
Electronics Association



Foreword - Pankaj Mohindroo

It is indeed an encouraging and proud moment for us at ICA that mobile handset and components have emerged to be the Champion product category under the "Make in India" program of the Government. India has already overtaken Vietnam to be the second largest producer of handsets by volume with production reaching 225 mn units valued at INR 1,32,000 crs.

While 120 new manufacturing/ assembling units are already established across states which has generated employment for approx. 4.5 lakhs, we consider this just to be the beginning of a transforming journey ahead. Considering the phased implementation of the PMP (Phased Manufacturing Program) roadmap aimed at establishing a robust component manufacturing eco-system it is estimated that approx. 1400 plus new plants are expected to be set up over the next 7-8 years.

The Phased Manufacturing Program (PMP) is the key strategy adopted to achieve the vision to widen and deepen the components manufacturing eco-system in the mobile handset sector. The twin objectives of the PMP are to enhance value addition and generate employment.

While we embark on this important journey with the vision to establish India as the Global manufacturing HUB for handsets and components, ICA with support from McKinsey has undertaken an impact analysis study "Making India – The Global Manufacturing Power House for Mobile Handsets & Components".

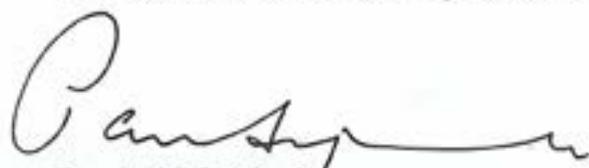
I wish to express my sincere gratitude to the Hon'ble Minister for Electronics & IT, Hon'ble Minister for Communications (Independent Charge), Hon'ble Minister for Commerce and Industry, Secretaries – MeitY, DoT, DoC and other senior officials from MeitY, DoT, DIPP, DoC and PMO for their constant support and guidance on this important nation building task.

We are confident that the findings and recommendations derived from this mid-term analysis done through extensive studies and brainstorming sessions within the industry and through deep studies and research will provide a clear understanding about the current manufacturing position of India in the mobile handset and components space and what all remedial measures the GOI can possibly undertake to achieve the larger vision to establish India as the Global manufacturing HUB in this sector.

The conclusions and recommendations of this Report are solely those of ICA. The report draws on multiple sources of input, including economic analysis from McKinsey & Company, interviews with industry and government experts, perspectives from ICA member organisations and data from publicly available data sources (IDC, Strategy Analytics, IHS, Capital IQ)

My very special thanks also to the ICA core team (Chander Kohli, Executive Director, ICA and Bijesh Kumar Roul, Director & Special Assistant to National President, ICA) for their painstaking efforts in bringing out this report.

I wish to assure the Government of India and the nation that we will relentlessly pursue this endeavour and help undertake appropriate measures based on the recommendations so that in the coming years we realize our dream into "Making India – The Global Manufacturing Power House for Mobile Handsets & Components".



Pankaj Mohindroo

Table of Contents

I
Executive summary

14

II
The resurgent mobile
manufacturing industry
in India

Rebuilding the mobile manufacturing base

16

Growing smartphone market starting to taper

16

Making in India...for the world

17

III
India's PMP policy:
A launchpad to boost
mobile manufacturing

Growth initiated by PMP

20

Focus areas needing major improvement

21

Need for a mega manufacturing policy to attract mega-ecosystems
or "motherships"

22

Biggest bottlenecks hampering India's mobile manufacturing vision

23

IV
Lessons from China,
Vietnam and Brazil

China - how to become a leader in handset and component exports
while building the world's largest domestic market

26

Vietnam - how to become a leader in handset and component exports
despite a small domestic market

28

Brazil - how flawed policies resulted in a lost opportunity

30

V
Strategic measures
to make India the
global mobile
manufacturing hub

Taking stock of the manufacturing objectives

34

Eight pillars to achieve the manufacturing objectives

34

Strategy to make India the global mobile manufacturing hub

34

VI
Annexures

Annexure 1 - MEIS export incentive

38

Annexure 2 - Import duty drawback

44

I Executive summary

Collapse of Indian mobile manufacturing

At its peak in 2011, India produced 155 million handsets, of which it exported 105 million. This was driven to a large extent by Nokia's manufacturing operations in India. Over the years, India's mobile manufacturing sector deteriorated rapidly, producing only 58 million handsets in 2014 while exports were nil. The subsequent closure of the Nokia plant due to tax disputes, and a failure to attract other mobile manufacturers led to this collapse.

Resurgence due to the phased manufacturing program and domestic demand

Today, India is steadily reclaiming its position as a global manufacturer of mobile devices and parts. Around 120 manufacturing units have come up since 2014, driven by the introduction of the Phased Manufacturing Program (PMP) and on the back of strong domestic market demand. India produced 225 million mobile phones in 2017 worth USD 20 billion, with exports of around USD 0.1 billion. The tapering domestic market, however, is now prompting a shift in focus from "Making in India for India" to "Making in India for the world". If India extends its ambitions to the export market, it could manufacture around 1,250 million handsets by 2025. This could fire up an industry worth around USD 230 billion and create more than 47 lakh jobs in the process just from Assembly, Programming, Testing and Packaging (APTP) operations and PMP sub-assembly operations.

PMP is effective but does not go far enough to establish India as a global manufacturing hub

While PMP has helped kickstart this recent growth in mobile manufacturing, it has failed to address two major focus areas that could help capture the industry's full potential:

- 1. Adoption of an export orientation:** In value terms, the 2017 estimated exports of around

USD 0.1 billion are short of the target for 2019 of USD 9 billion. Despite some improvement in exports since 2015, India still has a long way to become an export hub.

- 2. Creation of a component/sub-assembly ecosystem:** While appreciable progress was achieved under the PMP-2016 roadmap by establishing approximately 51 components manufacturing units, only 10 manufacturing units have been set up so far under the PMP-2017 roadmap (approximately seven manufacturing units in mechanical parts and three in USB cables). Thus, PMP has had limited success in establishing a domestic component/ sub-assembly ecosystem that goes beyond chargers and adaptors. This is due to two main factors:
 - a.** India has yet to attract the major mobile manufacturing ecosystems or "motherships" which represent a combination of the brands and their unique supplier ecosystems. Some of the typical examples of these are Samsung, Apple, Huawei, Oppo, Vivo, Xiaomi, etc.
 - b.** A suitable policy environment and effective outreach efforts are currently absent to promote investments by major component manufacturers under the Make in India program.

The limited success of PMP on these two significant fronts raises a pertinent query regarding the need for a new policy for successfully establishing a mega manufacturing ecosystem. Without a calibrated approach, we may fall short of our aspiration to establish India as a global manufacturing hub for mobile handsets and components.

Lessons from China, Vietnam and Brazil

An analysis of competing locations shows that export-oriented policies and incentives can create global leadership and dominance for countries like China, which have a large domestic market, as well as Vietnam, which

has shown tremendous success despite a small domestic market. On the other hand, Brazil, with immense potential, failed to make a mark in global handset and component manufacturing due to flawed policies.

It is important to note, however, that both China and Vietnam developed mobile manufacturing while simultaneously nurturing the broader electronics industry. Therefore, India also needs a broader focus on the electronics manufacturing industry beyond just mobile handsets and components. Targeting growth in India's mobile manufacturing industry like China and Vietnam, while the rest of the electronics manufacturing industry is still nascent, would require a significant push by way of new and tailor-made government policies.

Strategic measures to make India the global mobile manufacturing hub

The vision to set up mega mobile-manufacturing ecosystems and thus become the global manufacturing hub could be achieved by putting into action the eight-part strategy originally identified by the India Cellular and Electronics Association (ICEA).

1. **Duty differential through PMP:** Imposing duties on imported handsets and components in a phased manner to boost local manufacturing while the industry was still developing
2. **Export incentives:** Developing a robust export promotion strategy through increasing incentives under Merchandise Exports from India Scheme (MEIS) and duty drawback rates available for mobile handsets
3. **Easier set-up and expansion of manufacturing capacity:** Allowing easy import of capital goods and easy and cheaper availability of capital for companies manufacturing mobile handsets and their parts, components and accessories
4. **Competitive direct tax policy:** Introducing direct tax holidays for the mobile manufacturing industry



to ensure competitiveness against manufacturers enjoying low tax schemes in other countries

5. **Labour reforms:** Introducing reforms to ease retrenchment of labour and closing of establishments, allowing flexibility in working hours and overtime, and improving skill development efforts in the country
6. **Ease of doing business:** Introducing measures to improve turnaround time at ports, streamlining GST rules and refining e-waste disposal rules
7. **Effective outreach efforts:** Introducing coordinated outreach efforts between the government and the industry bodies to attract the major handset and component manufacturers to set up operations in India
8. **Design ecosystem:** Creating a thriving and stable design ecosystem in the country by aiding in skilling and talent availability for mobile handset design and manufacturing.

While significant actions have already been taken on strengthening PMP, concerted action is now required on the broader set of eight pillars. In summary, this would require an entirely new policy framework driven by the vision for making India a global manufacturing hub for mobile handsets and components.

II The resurgent mobile manufacturing industry in India

India is gradually rebuilding its mobile manufacturing base on the back of supportive policies like PMP and growing domestic market demand. The tapering domestic market, however, indicates that the time to shift focus to “Making in India for the world” is now. Such a shift towards manufacturing for the export market can help India’s mobile manufacturing to achieve its full investment and job creation potential and become a global manufacturing hub.

Rebuilding the mobile manufacturing base

India’s mobile manufacturing journey began in the mid-2000s with the entry of Nokia. The Finnish multinational was attracted by the tax exemptions offered through SEZs in India, and set up a massive plant at Sriperumbudur in Tamil Nadu. Manufacturing grew impressively between 2008 and 2012 in India, with the major thrust coming from Nokia’s production figures. In 2011, the country produced 155 million handsets, exporting 105 million. Subsequently, the Nokia plant scaled down and eventually closed 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 also 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 just 58 million units with exports going down to zero.

Since 2014, the tide has begun to turn and India is rebuilding its mobile manufacturing base. With policies like the PMP acting as enablers, the country today has 120 mobile handset and component manufacturing units which have attracted an investment of roughly USD 1 billion (including fixed and working capital investment)¹. Over the last 18 to 20 months, mobile manufacturing in India has created around 4.5 lakh jobs. India produced 225 million mobile phones in 2017, worth USD 20 billion.

Growing smartphone market starting to taper

The resurgence in India’s mobile manufacturing industry was built on the back of strong domestic demand, with the introduction of the Phased Manufacturing Program encouraging import substitution. Between 2014 and 2017, the Indian smartphone market grew over 37 percent in value per annum, from USD 9 billion to USD 22 billion. In 2014, the Indian smartphone market registered sales of 70 million units; this figure grew 29 percent per annum to 150 million units in 2017. The strong growth seen between 2014 and 2017 is starting to slow down, however, with the projected growth rate of 14 percent per annum being roughly half the previous growth rate (Exhibit 1).

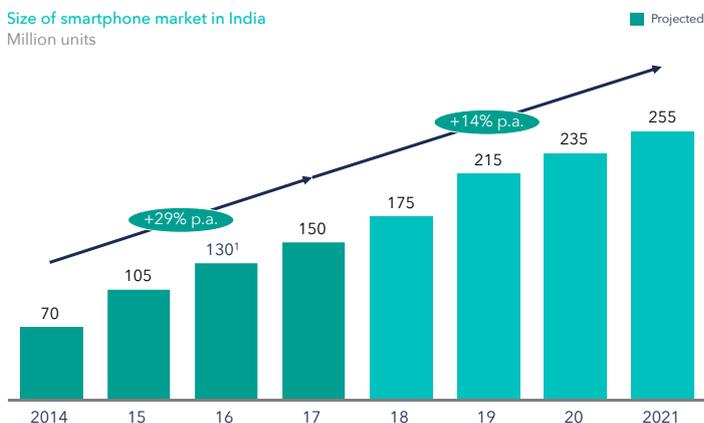
Making in India...for the world

India’s mobile manufacturing industry currently produces primarily for the domestic market. If India

EXHIBIT 1

Strong historical growth in smartphone market but slowdown expected

Size of smartphone market in India
Million units



¹ Effect of India wide currency demonetization
SOURCE: IDC shipment database, Strategy analytics

¹ Based on ICEA estimates

restricts itself to making mobile handsets and components only for India, it would be likely to manufacture only 450 million handsets and employ 18 lakh people for an industry worth around USD 80 billion by 2025. This industry is likely to be limited to APTP operations with minimal investment and job creation in the higher value-adding sub-assembly and component manufacturing operations. This is because sub-assembly operations and component manufacturers require large volume commitments to consider shifting established manufacturing bases in other countries.

Additionally, mobile handset ecosystems are largely organized around a few “motherships” which essentially combine brands and their unique supply chains, e.g. Samsung, Apple, Huawei, Oppo, Vivo, Xiaomi, etc. The sub-assembly and component manufacturing ecosystems only move when the “mothership” sets up a large-scale manufacturing base in a country. Since such large-scale investments cannot be made purely to serve the domestic market, the localization of sub-assembly and component manufacturing is only likely to happen when India manufactures for the export market as well.

If India extends its ambition beyond making in India for India, to making mobile handsets and components in India for the world, it could manufacture around 1,250 million handsets across various segments by 2025, firing up an industry worth around USD 230 billion. This would create around 47 lakh jobs in the process through the APTP operations and PMP sub-assembly plants set up in the country. The job creation and investment potential is even larger when considering the component manufacturing ecosystem that could be set up beyond the PMP roadmap. For example, domestic manufacturing (beyond simple assembly) of chargers could create local industries for each of the sub-components as shown in the next table.

Sub-components for charger manufacturing		
S.No	Sub-component	Constituent parts
1	Transformer	Plastic bobbin, Copper wires, Insulation tape, Ferrite core, Triple insulated winding wire, Varnish
2	PCBA	Active components, Passive components, Semiconductor ATMP
3	Mechanics	Pins, Plastic mouldings, USB connector, USB cable
4	Cables	Copper wires, Insulation
5	PCB	NA

The impact of attracting the “motherships” and their supplier ecosystems by manufacturing for the world can be assessed by analyzing the scale of impact created in China. The country is home to the manufacturing ecosystems for Apple, Huawei, Oppo, Vivo, Xiaomi etc. This led to the development of a mature supplier ecosystem in the country leading to large-scale investments. Just in the Apple supplier eco-system over 30 suppliers with annual revenues greater than USD 1 billion have set up manufacturing operations in China. The top 15 component suppliers earned over USD 80 billion in annual revenues in 2016 alone, on a capex investment of around USD 96 billion since 2007.

It is important to note, however, that the development of China’s mobile manufacturing industry happened along with the wider electronics industry. Thus, targeting growth in India’s mobile manufacturing industry similar to China, while the rest of the electronics manufacturing industry is still nascent, would require a significant push by way of new and tailor-made government policies.



“India manufactured about 110 million mobile phones in 2015-16 as compared to 60 million in 2014-15 showing a growth of over 90%. In value terms, India’s mobile manufacturing industry produced mobile phones worth Rs 54,000 crore in FY15-16 compared to Rs 18,900 crore in FY14-15. The same reached Rs 94,000 crore by end of 2017”

**Shri Ravi Shankar Prasad,
Hon’ble Minister of IT & Electronics**



III India's PMP policy:

A launchpad to boost mobile manufacturing – but can tariff based policies alone help establish India as the global manufacturing hub!

To leverage the surge in mobile handset assembling activity, witnessed immediately after the Budget 2015 announcements introducing 11.5 percent differential duty to promote domestic handset assembling activity, the Government thought it appropriate to formulate and establish the PMP in consultation with the India Cellular and Electronics Association (ICEA) and industry leaders.

Subsequently, MeitY notified the PMP roadmap for 2016–20 to widen and deepen the components manufacturing ecosystem in a time bound/phase-wise and component-wise manner. The PMP roadmap aims at achieving the twin objectives of enhancing value addition in a time-bound manner and generating significant employment. The schedule of duty eligibility as per the PMP notification issued by MeitY is reproduced below.

- a. **2016-17:** (i) Charger/ Adapter (ii) Battery Pack (iii) Wired headset
- b. **2017-18:** (iv) Mechanics (v) Die cut parts (vi) Microphone/Receiver (vii) Key pad (viii) USB cable
- c. **2018-19:** (ix) Printed circuit board assembly (x) Camera module (xi) Connectors

- d. **2019-20:** (xii) Display assembly (xiii) Touch panel/ cover glass assembly (xiv) Vibration motor/ ringer

Some of the important milestones/targets/draft targets formulated under the overall PMP ambit (including the next phases of PMP-II and PMP-III roadmaps, which are still under draft/formulation stages) for 2025–26 with regard to mobile handset and components manufacturing, employment generation potential and export numbers are as follows:

Mobile handset production & exports

- **Production:** 1,200 million, valued at approximately USD 230 billion
- **Exports:** 800 million, valued at approximately USD 150 billion
- **Total employment:** 56 lakh up to PMP-I stage

Components manufacturing targets

- USD 210 billion worth of production under PMP-I & II (yet to be finalized) roadmap
- USD 90 billion worth of production under PMP-III (yet to be finalized) roadmap

Growth initiated by PMP

The first green shoots started appearing on India's mobile manufacturing horizon after differential duty was imposed on PMP-2016 components, namely chargers/adapters, battery packs and wired headsets. Approximately 51 new manufacturing units have been established so far to produce these components (Exhibit 2).

In 2017-18 alone, these 120 units have produced handsets worth USD 20 billion—a massive increase from USD 3 billion in 2014-15. As a result, India's imports of mobile handsets are decreasing—the import bill is down around 45 percent from USD 9 billion in 2014-15 to around USD 5 billion in 2017-18 (Exhibit 3).

EXHIBIT 2

The PMP has encouraged the setup of 120 new manufacturing units for handsets and components across India by the end of FY2017-18

S.No	Vertical	No. of units	S.No.	State	No. of Factories
1	Mobile Handsets	59	1	UP	52
2	Adapter / Chargers	27	2	Haryana	11
3	Battery Packs	20	3	Delhi	7
4	Wired Headsets	4	4	Tamil Nadu	7
5	USB Cables	3	5	Telangana	7
6	Mechanical Parts	7	6	Uttarakhand	7
			7	AP	6
			8	HP	6
			9	Maharashtra	6
			10	Karnataka	4
			11	Rajasthan	3
			12	Daman	2
			13	Karnataka	1
			14	Punjab	1
			15	West Bengal	1
	Total	120		Total	120

EXHIBIT 3

Rapidly growing mobile production has cut down import figures



The total investments made in the mobile handset and components manufacturing space as of now is approximately USD 1 billion (including fixed and working capital investment)¹. And the total direct and indirect employment generated based on manufacturing in these 120 manufacturing / assembling units is approximately 4.5 lakh.

PMP's success has been limited, however, due to the slow development of India's mobile network, limited availability of 4G and video-ready infrastructure, absence of a robust app economy as well as the nascent gaming market. In part, domestic manufacturing will depend on the speed and robustness with which the mobile networks start offering 4G and 5G services beyond large cities.

Focus areas needing major improvement

Due to the success of PMP in manufacturing for the domestic market, India has grown its share in global mobile manufacturing. It is now the second-largest producer by volume after China and ahead of Vietnam. But in terms of value addition, it significantly lags both China and Vietnam (Exhibit 4).

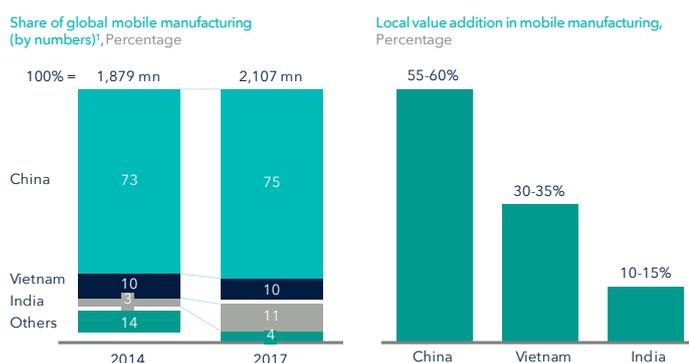
India could, therefore, build further on the supportive platform created by PMP, to catch up with (and perhaps even surpass) global leaders in mobile handset and component manufacturing. Two areas of policy focus have been identified as preconditions for such a growth.

1. Formulate and execute an export-oriented policy

The domestic smartphone market in India is starting to saturate and no longer witnessing the same growth as before. In terms of volume, smartphone sales in India grew at 29 percent per annum between 2014 and 2017 whereas the predicted growth rate between 2017 and 2021

EXHIBIT 4

Now the 2nd largest producer of mobile handsets by volume, India still lags both China and Vietnam in value addition



¹ Using data from IHS. China production according to National Bureau of Statistics China is higher due to inclusion of SKD units as well. SOURCE: IHS data, ICEA Union budget recommendations 2018-19, Vietnam General Statistics office

is expected to slow down to half that figure. It is vital, therefore, for Indian mobile manufacturing to formulate and execute an export-oriented policy and strategy. In value terms, the 2017 estimated exports of around USD 0.1 billion short of the target for 2020 of USD 9 billion (Exhibit 5). Despite some improvement in exports since 2015, India still has a long way to go to become an export hub. A truly game-changing strategy, propelled by adequate policies and investments, is required to achieve the export aspirations for mobile manufacturing in India.

2. Attract investment in the component manufacturing ecosystem

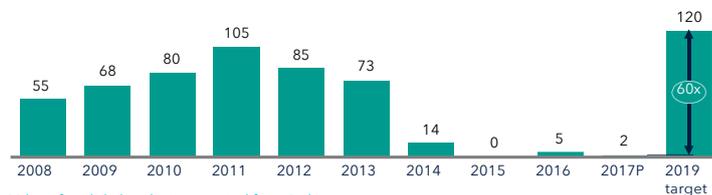
India could prompt the creation of more jobs and investment through establishing a domestic

¹ Based on ICEA estimates

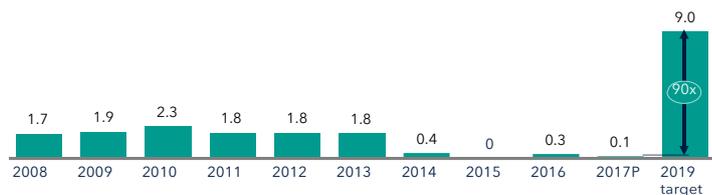
EXHIBIT 5

Mobile handset exports have a long way to catch up to the envisioned target of 120 million units by 2019

Number of mobile handsets exported from India
Millions



Value of mobile handsets exported from India
USD Billions



SOURCE: ICEA union budget recommendations 2018-19

component manufacturing ecosystem that goes beyond chargers and adaptors. While appreciable progress was achieved vide implementation of the PMP-2016 roadmap through establishment of approximately 51 components manufacturing units, the same level of success has not yet been witnessed so far as PMP-2017 components are concerned, namely mechanical parts (plastics and metals), die cut parts, microphones and receivers, key pads and USB cables. The development/ establishment of only around 10 manufacturing units has been reported so far, approximately seven manufacturing units in mechanical parts and three in USB cables, across the entire gamut of components covered under the 2017 roadmap. Thus, despite duty advantages being offered as part of the PMP roadmap to incentivize indigenous manufacturing, it is has not proven sufficient to attract investments by big components manufacturers. A specific policy aimed at attracting investments in the component manufacturing ecosystem needs to be developed.

The limited success of PMP on these two significant fronts raises a pertinent query regarding a need for a shift in strategy for successful establishment of a mega manufacturing ecosystem. This needs immediate attention and redressal at the highest levels.

Need for a mega manufacturing policy to attract mega ecosystems or "motherships"

Mobile handset ecosystems are largely based on the concept of "motherships", which

essentially combines brands and their unique supply ecosystems, such as Samsung, Apple, Huawei, Oppo, Vivo, Xiaomi, etc. The bulk of investment as well as employment generation potential lies with these ecosystems. The table below shows how these "motherships" account for more than 80 percent of the global mobile handset sales revenue.

Mothership	2017 mobile handset sales volume (USD billion)	2017 mobile handset sales revenue (USD billion)	Share of global mobile handset sales revenue (%)
Samsung	317.3	102.2	22
Apple	215.8	164.9	35
Huawei	153.1	39.4	8
OPPO	111.8	32.8	7
Vivo	95.2	23.9	5
Xiaomi	92.4	13.6	3
Others	486.8	90.8	20
Total	1,472.4	467.6	100

A significant factor behind the failure to attract investments in domestic manufacturing/ assembly for components, such as mechanics, die cut parts, etc., is the absence of global supplier ecosystems of these "motherships" which only co-invest and establish manufacturing when the "mothership" enters a country at scale. Without massive manufacturing volume commitments, it is not possible to attract these suppliers to shift

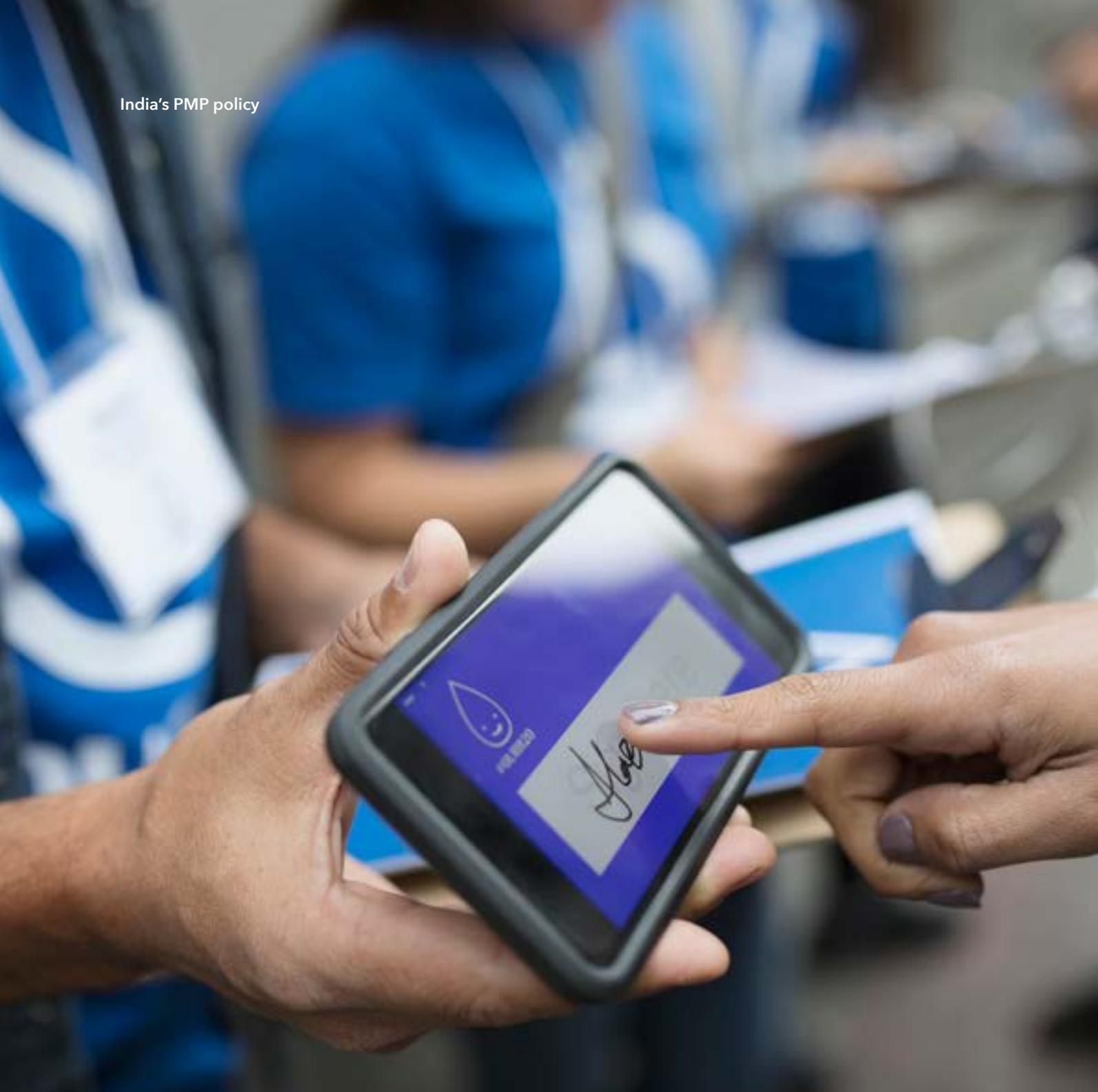
from their well-established manufacturing bases in China, Japan, Korea, Vietnam, Taiwan, etc. The absence of a policy to incentivize these “motherships” to set up large-scale manufacturing in India has resulted in our inability to attract the wider supplier ecosystem to India. Additionally, given the dominance of these five or six “motherships” of the global mobile handsets market, exports of mobile handsets from India have not flourished either.

Therefore, it is of paramount importance for us to develop a coherent policy to attract these “motherships” along with their ecosystems to begin manufacturing at scale in India, both in terms of value and volume. Unless there is a calibrated approach to create a specific policy to attract investments from “motherships”, we may fail in our strategy to establish India as a global manufacturing hub for mobile handsets and components. This approach will need to focus on clearing the bottlenecks faced by mobile manufacturing in India in a holistic manner.

Biggest bottlenecks hampering India's mobile manufacturing vision

Some of the important bottlenecks which are currently impairing the manufacturing growth:

1. **Absence of long-term, predictable and robust export incentives:** The only visible incentives currently applicable to promote exports from India are 4 percent MEIS and approx. 1 percent duty draw back. The current MEIS is also scheduled to expire in the current year. This is one of the most important factors which will boost exports from India.
2. **Absence of mega manufacturing clusters and accompanying infrastructure:** China, Taiwan and Vietnam have created massive manufacturing clusters with facilities that include uninterrupted power supply, residences, roads, schools, hospitals and others. A similar effort needs to be replicated suited to Indian conditions and context.
3. **Cost of capital and availability of capital:** While the nation aspires to become the global manufacturing hub for handsets and components, the industry continues to suffer because of the high cost of capital and limited access to capital. This continues to be a major challenge facing the industry.
4. **Absence of a direct tax incentivization policy:** There are no direct tax incentives for this sector in India today—not even for manufacturing meant for exports. This is irrespective of the fact that direct tax holidays are being offered by various competing geographies such as Vietnam or China for this sector.
5. **Absence of industry-friendly labour laws:** Considering the dynamic nature of the mobile manufacturing ecosystem with varied business requirements and the nature of manufacturing processes which keep on evolving with time, the establishment of an industry friendly labour law regime is the key to the success of the manufacturing ecosystem. Labour law reforms in areas such as easy retrenchment of labour in case of closure of establishments (Industrial Disputes Act), allowing flexibility in working hours and overtime (Factories Act) and use of apprentices for skill development (Apprentices Act), etc. must take place at the earliest.
6. **Ease of doing business issues:** The lack of predictability of turnaround time at airports or sea ports, streamlining GST rules and refining e-waste disposal rules, etc., are the major constraints.



7. Absence of an effective outreach drive:

Effective outreach efforts to promote investments under the Make in India program in select geographies have been limited. There is an urgent need to put together a crack team comprising select officials from MeitY, DIPP, select state governments and ICEA/ industry to enhance outreach efforts.

8. Absence of a design ecosystem: Currently, India has a small footprint in the design/R&D ecosystem which can aid and support the domestic manufacturing ecosystem pertaining

to handsets and components. A robust mobile handset manufacturing ecosystem cannot be established without setting up indigenous design houses to cater to the domestic market. The lack of a design institute catering to skill generation and creation of a talent pool is a major factor holding back the design ecosystem in India.



“India could, therefore, build further on the supportive platform created by PMP, to catch up with (and perhaps even surpass) global leaders in mobile handset and component manufacturing”

IV Lessons from China, Vietnam and Brazil

EXHIBIT 6

China dominates mobile handset production

Annual mobile handset production in China¹
Millions



Share of global mobile handset production¹
Percentage



¹ Using data from IHS. National Bureau of Statistics China numbers are higher due to inclusion of SKD units as well
SOURCE: ICEA Union Budget recommendations 2017-18, IHS data

An analysis of the strategies followed by China, Vietnam and Brazil indicates that incentive-based measures have succeeded in boosting the mobile handset and component manufacturing industry, and protectionist, tariff-centred policies have failed to establish a globally competitive industry.

China – how to become a leader in handset and component exports while building the world’s largest domestic market

China is the world leader in mobile manufacturing, with a 75 percent share of global handset production in 2017. Annual mobile handset production in China has gone up from 686 million in 2008 to 1,576 million in 2017 (Exhibit 6). Due to its dominance in mobile handset production, China has been able to successfully capture the export market for both mobile handsets as well as components, exporting more than USD 160 billion in 2017 alone (Exhibit 7). Its wider electronics and electrical equipment exports touched USD 600 billion in 2017– more than 3.5X the export value in 2005 (Exhibit 8). This dominance was driven by a conducive policy environment, strong local demand, and a well-developed supplier ecosystem.

1. Conducive policy environment in China

China’s handset manufacturing policy evolved in two phases.

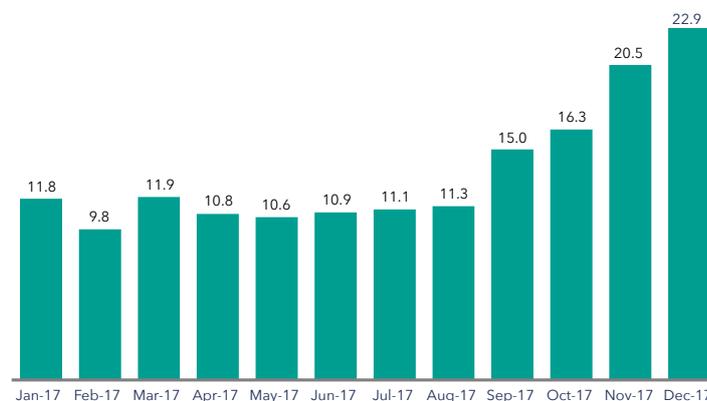
First, the country penalized foreign manufacturers:

- It enforced compulsory licensing for local handset manufacturing.
- It charged 17 percent VAT on imported phones compared to only 6 percent for locally made phones.
- It required any foreign player setting foot in the market to enter into a 50-50 joint venture with a local manufacturer.

EXHIBIT 7

China is a global leaders in mobile handset and component exports

Mobile handset and components export from China in 2017- by value
USD Billions



SOURCE: General Administration of Customs, People's Republic of China

However, this protectionist approach was largely unsuccessful—Chinese manufacturers who came up due to the compulsory licenses (such as Hisense and Conca) failed to establish themselves in the mobile manufacturing industry.

China soon abandoned this approach, rapidly moving to incentivize domestic manufacturers through non-tariff measures:

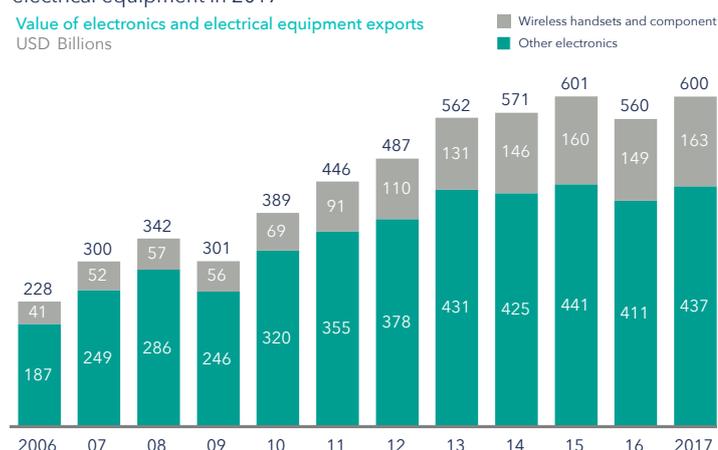
- It reduced corporate income tax to 15 percent (from the usual 25 percent) for high and new technology enterprises (HNTE). The HNTE certificate is valid for three years once it has been approved and can be renewed every three years. The policy was introduced nationwide in 2007 and is still active.
- It offered a 150 percent tax deduction for qualifying R&D expenses. The policy was introduced in 2006 and the benefits have been sustained through multiple notifications from the government.
- It exempted the purchase of imported R&D equipment from customs duty and VAT. This policy was introduced in 2007 and was active till 2016, to give ample time for the industry to mature.

In addition to the non-tariff measures, China also invested in a set of supportive structural reforms:

- **SEZs/ mega manufacturing clusters:** These special economic zones featured faster approval processes and more flexible labour laws, besides fiscal incentives like a full VAT refund on certain electronics products. These SEZs functioned as mega manufacturing clusters with the government providing a range of facilities such as cheap and uninterrupted power supply, residence and training for workers, schools, hospitals, roads, etc.
- **Land availability:** Manufacturing companies received land use rights at a minimal fee, with low power and water costs.

EXHIBIT 8

China exported more than USD 600 billion worth of electronics and electrical equipment in 2017



SOURCE: General Administration of Customs, People's Republic of China

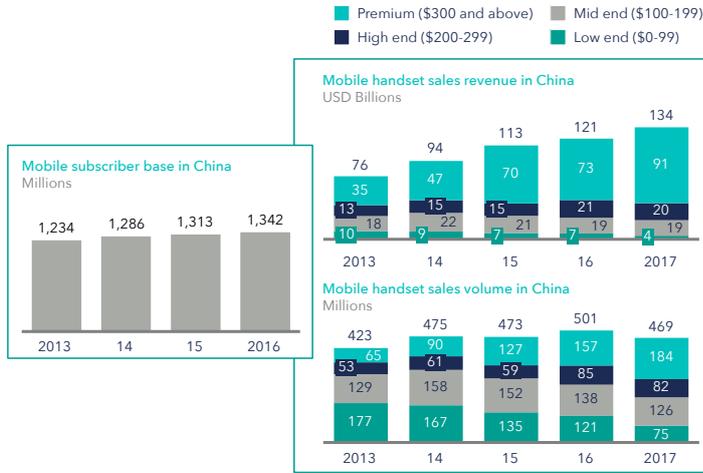
- **Capital availability:** The government also offered a low lending rate of just 4.3 percent (in 2016), whereas the comparable rate in India was 9.7 percent.
- **Labour productivity:** China offered a set of incentives to attract skilled overseas professionals such as one-off rewards, tax incentives, patent subsidies and faster residence permits. The Vocational Education Law promoted relevant skill development in the emerging workforce.

2. Strong local demand for mobile handsets

China has strong local demand for mobile handsets, largely driven by the early adoption of 3G and 4G technologies in the country. The plethora of local language content and mobile applications available to the population helped prompt high levels of mobile handset penetration in the country. For example, China's local app stores offer more than 4 million mobile applications. The Chinese also have a thriving mobile gaming culture which contributed to the demand for gaming capable handsets. These trends can be clearly seen in the consumers' distinct preference for higher-end smartphones

EXHIBIT 9

China enjoys strong local demand for mobile handsets



with handsets costing upwards of USD 200 accounting for more than 80 percent of the total 2017 handset sales revenue in China, according to IDC data (Exhibit 9).

3. Well-developed supplier ecosystem

China has a well-developed ecosystem of mobile component suppliers with thousands of such companies. More than 30 such suppliers with annual revenues greater than USD 1 billion have set up manufacturing operations in China (Exhibit 10). These suppliers cover all kinds of complexity levels, ranging from low complexity elements like assembly or PMP Phase 1 components like batteries or chargers, to higher-complexity components for Phase 2, 3 or 4 like display, camera module, etc. This has led to heavy investments in the region. The top 15 component suppliers have collectively made capex investments of around USD 96 billion since 2007 (Exhibit 11). China accounts for a significant portion of these investments for the set up and expansion of facilities in the country.

EXHIBIT 10

A well-developed supplier ecosystem - more than 30 suppliers with billion dollar revenues have set up manufacturing in China

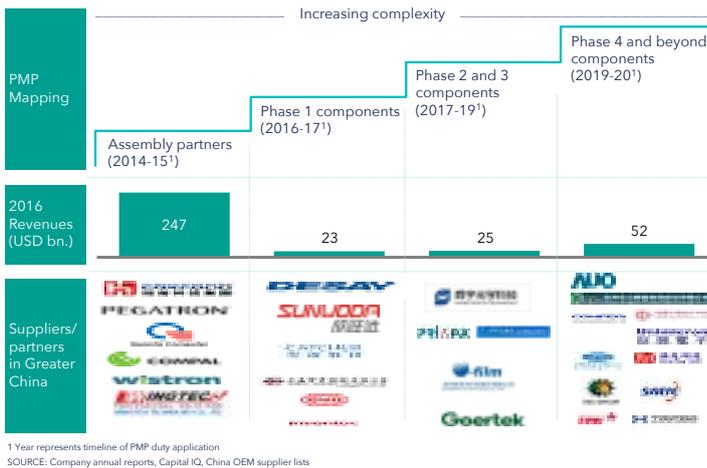
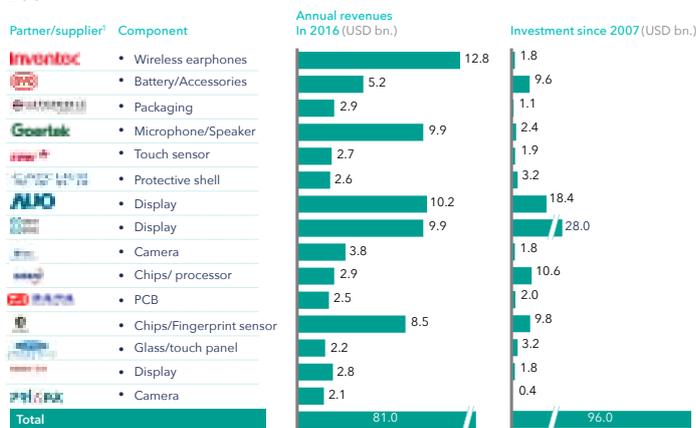


EXHIBIT 11

The top 15 component suppliers have invested around USD 96 billion since 2007



Vietnam – how to become a leader in handset and component exports despite a small domestic market

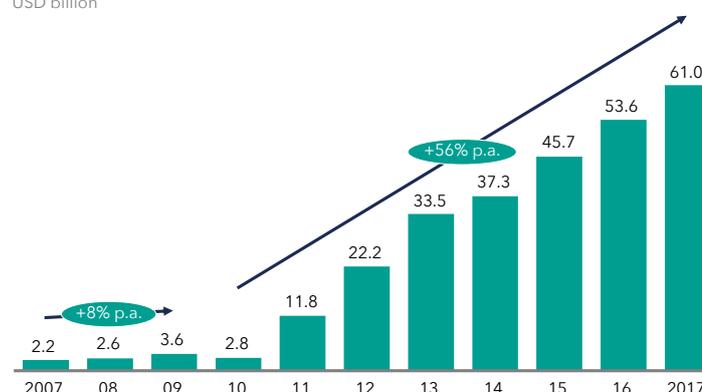
Vietnam emerged as a preferred destination for electronics manufacturing post 2009 due to incentives-based policy interventions (primarily tax and duty exemptions), reforms to ease land and capital availability as well as its strategic position in global trade. Such changes encouraged investments from global players such as Samsung, which invested USD 9.9 billion in the country.

Consequently, export value grew exponentially in just a decade, from around USD 2.2 billion in 2007 to USD 61 billion in 2017. While annual exports had been growing at a gradual pace of 8 percent per annum between 2007 and 2010,

EXHIBIT 12

Annual electronics exports from Vietnam have steadily grown since 2011

Vietnam export figures
USD billion



SOURCE: Vietnam Customs, Vietnam GSO, Vietnam Electronic Industries Association (VEIA), Aranca, Press search

export figures shot up at around 56 percent between 2011 and 2017 due to these changes (Exhibit 12). Vietnam is a clear example of a world-class electronics industry set up on the back of a burgeoning export market despite a small domestic market.

1. Tax incentives and duty exemptions in Vietnam

Vietnam followed a policy of tax incentives and duty exemptions to develop domestic electronics manufacturing. It introduced significant tax exemptions to incentivize investments in the sector:

- **Corporate income tax:** Companies enjoyed a tax holiday within 4 years of starting to earn profits; 50 percent reduction within 9 years. There was also a flat 10 percent tax rate for 30 years for high-tech projects (and 15 years for non-high tech projects).
- **Import tax:** Vietnam offered an import tax holiday for 5 years for material not yet domestically produced for use in industrial parks (IPs) and export processing zones (EPZs). It also allowed an import tax holiday for the duration of the project for commodities forming part of the fixed assets for all projects in IPs, EPZs and EZs.
- **Value-added tax:** Manufacturers paid 0 percent VAT for goods imported into EPZs and for means of public transportation in IPs and EPZs. Goods manufactured and imported to non-tariff area in EZs were exempt from VAT and excise duty.
- **Personal income tax:** Experts and employees in EZs could benefit from a 50 percent personal income tax exemption.

2. Easy land and capital availability

Additionally, Vietnam created an attractive business environment for investors by easing land and capital availability:

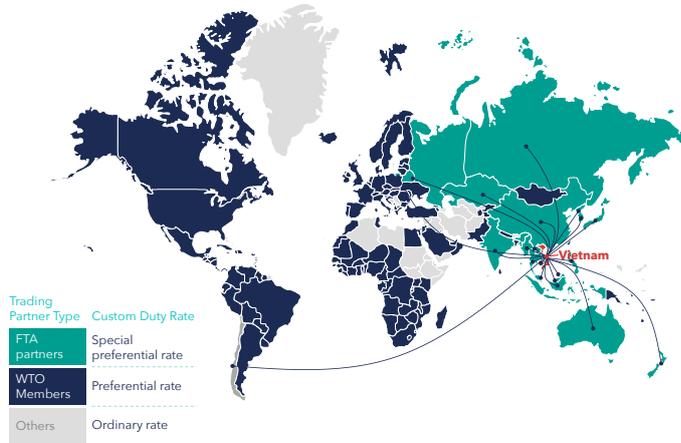
- **Land availability:** The government granted land-use rights through 50- to 70-year leases. Companies were not required to pay resettlement compensation to residents. Investment projects in select sectors such as electronics manufacturing received land and surface water rent exemptions. It also simplified the process of issuing construction permits—ranked 22nd in the world compared to China (179th) and India (184th).
- **Capital availability:** The State Bank of Vietnam capped the short-term lending interest rate for companies in hi-tech at 7 percent per annum. The government also offered a capex subsidy of up to 50 percent on infrastructure development.

3. Strategic position in global trade and integration with existing supply chains

The country's exports were also globally competitive due to its strategic positioning in trade through free trade agreements that enabled low/ zero duty imports of handsets manufactured in Vietnam (Exhibit 13). Proximity to the established supply chains of China and Taiwan helped the local manufacturing industry flourish due to easy availability of components. The seamless rail and road connectivity between South China and Vietnam (e.g., the Shenzhen to Hanoi highway) is a significant advantage for the Vietnamese mobile manufacturing industry as it enables quick access to Chinese made components not locally manufactured in Vietnam.

EXHIBIT 13

Vietnam enjoys a strategic advantage through free trade agreements propelled by a forward looking policy



1. High import tariffs and taxes

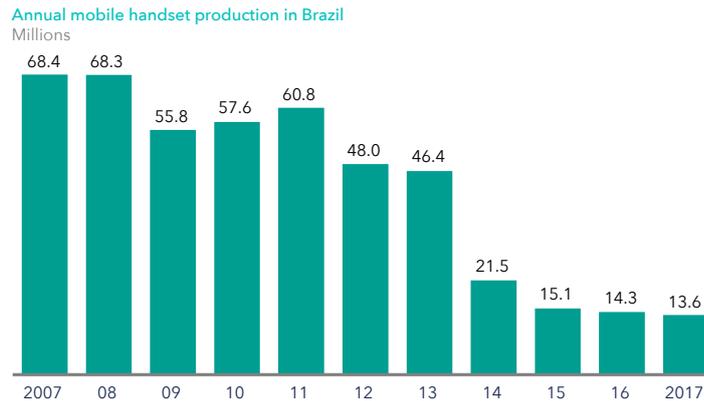
High import tariffs and taxes in Brazil made smartphones unaffordable, squeezing the market in Brazil. Some of these tariffs and taxes applicable in Brazil are:

- **Import duty:** This is a federally-mandated product-specific tax levied on a CIF (Cost, Insurance, and Freight) basis. In most cases, Brazilian import duty rates range from 10 to 35 percent. For smartphone imports, a 16 percent import duty is applicable.
- **Industrialized product tax (IPI):** The IPI is a federal tax levied on most domestic and imported manufactured products. As part of the federal government’s efforts to support local producers, IPI rates between imported and domestically produced goods within the same product category may differ. Generally, the IPI tax rate ranges
- **Merchandise and Service Circulation Tax (ICMS):** The ICMS is a state government value-added tax applicable to both imports and domestic products. The rate varies among states, for example in the State of São Paulo, the rate varies from 7 to 18 percent with the highest rate being applicable for smartphones
- **Program of Social Integration (PIS) and Contribution to Social Security Financing (COFINS):** The PIS and COFINS are federal social contributions designed for funding social security. Imports share the same rates applicable to domestic goods. PIS tax is 1.65 percent while COFINS tax is 7.6 percent.

These taxes and tariffs can add up to 50 to 60 percent of the retail price of a smartphone as shown in the following table.

EXHIBIT 14

Brazil’s mobile manufacturing figures have been dropping



SOURCE: IBGE PIA; MDIC; Statista; Telecom estimates

Brazil – how flawed policies resulted in a lost opportunity

Compared to China and Vietnam, Brazil is an example of a sharply declining mobile manufacturing industry, as evidenced by the exits of major manufacturers like Sony and Xiaomi from the country. An environment of constantly evolving rules of production and taxation as well a lack of significant fiscal incentives have prompted these departures. Brazil’s production of mobile handsets dropped steadily between 2011 and 2017, from 60.8 million to 13.6 million (Exhibit 14).

This sharp decline is due to high import tariffs and taxes, a lack of export-oriented incentives and the rising cost of production stemming from high labour costs.

Duty/ tax	Rate
Import duty	16.00%
Industrialized product tax (IPI)	15.00%
Merchandise and Service Circulation Tax (ICMS)	18.00%
Program of Social Integration (PIS)	1.65%
Contribution to Social Security Financing (COFINS)	7.60%
Total	58.25%

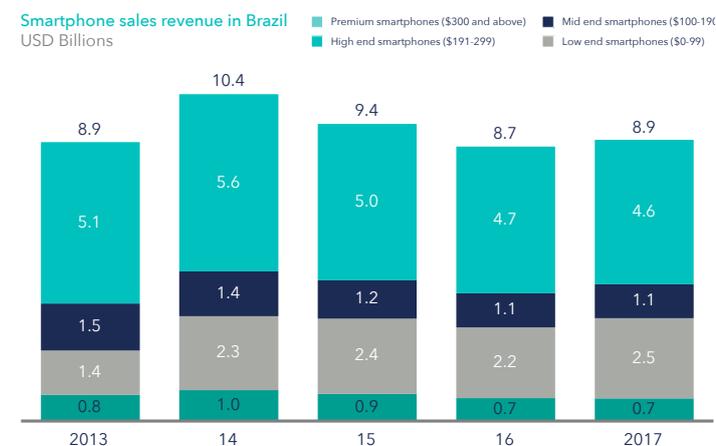
As a result, the price of purchasing a smartphone in Brazil is among the highest in the world. According to a Deutsche Bank study, the price of purchasing a high-end smartphone in Brazil is around 37 percent higher than the US, making it the second most expensive in the world after Turkey. The result has been a shrinking smartphone market with smartphone sales revenues falling from a peak of USD 10.4 billion in 2014 to USD 8.9 billion in 2016 (Exhibit 15).

2. Lack of export-oriented incentives

Brazilian exports are eligible for a zero-tax rating in theory. In practice, however, major administrative hurdles in getting tax refunds led to erosion of the zero-tax rating on Brazilian electronics exports. This rendered Brazilian electronics exports cost uncompetitive in the global market. Combined with the lack of sufficient export incentive schemes for mobile manufacturing, this has resulted in a collapse of mobile phone exports from Brazil (Exhibit 16).

EXHIBIT 15

Smartphone sales revenues have been dropping in Brazil

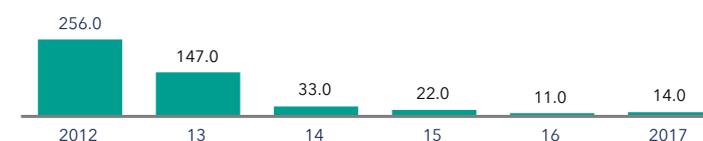


SOURCE: Strategy Analytics data

EXHIBIT 16

Lack of sufficient export incentives has led to collapse of mobile phone exports from Brazil

Mobile handset exports from Brazil- by value USD Millions



Mobile handset exports from Brazil- by volume Millions



SOURCE: Teleco

3. High cost of production due to rising labour costs

Labour costs in Brazil are much higher than other manufacturing locations. According to BCG's 2014 Global Manufacturing Cost-Competitiveness Index, the cost of manufacturing in Brazil is 23 percent higher than in the US, 36 percent higher than in India, and 27 percent higher than in China. While the costs of other components in overall manufacturing are broadly comparable across these countries, the disproportionately high labour costs in Brazil drive up its total manufacturing costs.

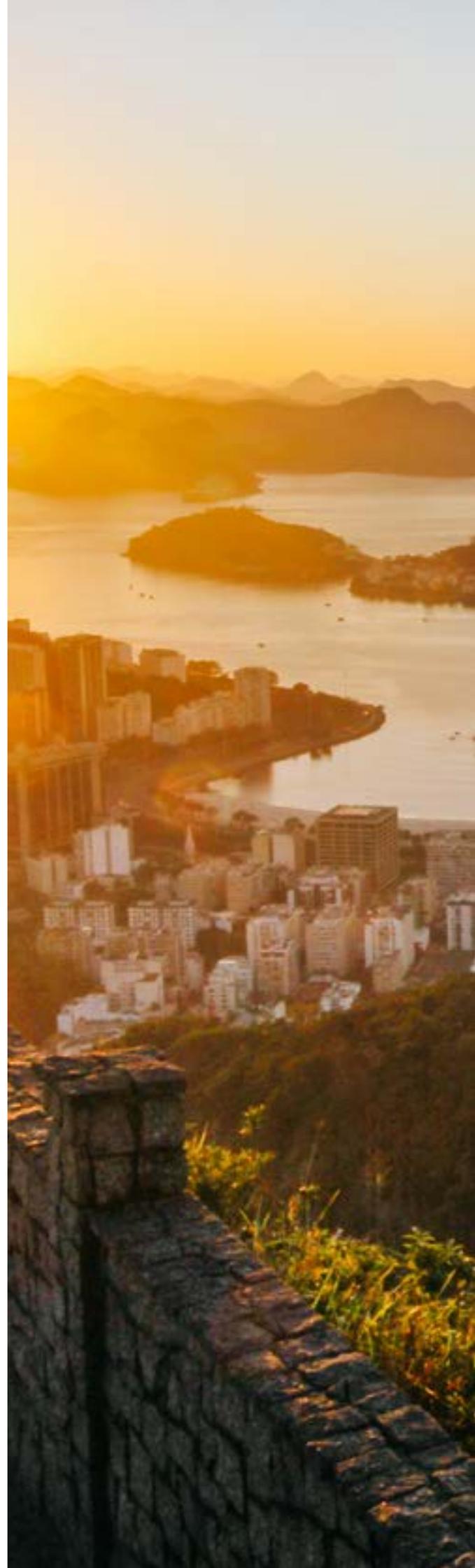
The primary factors behind the high labour costs in Brazil are the high levels of unionization as well

as the complexity of labour laws in the country. Some of the major provisions of the labour laws in Brazil contributing to high labour costs are¹:

- Employee protection against dismissal that is arbitrary or without one of 12 just causes defined by the law, and payment of compensation
- Irreducibility of wages
- Participation in profits or results as defined by law
- A regular work week not exceeding 44 hours, workdays preferably not exceeding eight hours, and overtime not surpassing two hours per day
- Paid annual vacations worth at least one-third of normal wages
- Right to be paid for a 13th month
- Minimum of 30 days of paid vacation per year
- Obligation to provide company transport, and either meals or the provision of a space to prepare or heat food

Due to the complicated and restrictive labour laws, Brazil is said to be the country with the highest number of labour claims in the world².

1 "Labour conditions at foreign electronics manufacturing companies in Brazil", Good Electronics report, Dec 2017
2 Brazilian Employment Law in a Nutshell", Thebrazilbusiness.com article, November 2016





V Strategic measures to make India the global mobile manufacturing hub

Taking stock of the manufacturing objectives

Some of the major goals/objectives towards establishing India a manufacturing HUB for mobile handsets and components as outlined by ICEA are as follows:

- a. **Industry growth:** Promote large-scale manufacturing/ assembling activity to produce 500 million mobile handsets by 2019, i.e., annual manufacturing output of USD 46 billion (20 to 25 percent of total global manufacturing)
- b. **Job creation:** Create employment for 1.5 million people by 2019
- c. **Export orientation:** Increase exports from the estimated 30 million units in 2014 to 120 million units by 2019
- d. **Component ecosystem:** Establish a sizable component industry with a turnover of over USD 8 billion by the year 2019

Eight pillars to achieve the manufacturing objectives

To achieve these objectives, an eight-pillared holistic strategy is envisioned:

1. **Duty differential through Phased Manufacturing Program:** Imposing duties on imported handsets and components in a phased manner to boost local manufacturing while the industry was still developing
2. **Export incentives:** Developing a robust export promotion strategy through increasing MEIS incentives and duty drawback rates available for mobile handsets
3. **Easier setup and expansion of manufacturing capacity:** Allowing easy import of capital goods and easy and cheaper availability of capital for companies manufacturing mobile handsets and their parts, components and accessories
4. **Competitive direct tax policy:** Introducing direct tax holidays for the mobile manufacturing industry

to ensure a level playing field against other leading mobile manufacturing nations with very low tax schemes

5. **Labour:** Introducing reforms to ease retrenchment of labour and closing of establishments, allowing flexibility in working hours and overtime and improving skill development efforts in the country
6. **Ease of doing business:** Introducing measures to improve turnaround time at ports, streamlining GST rules and refining e-waste disposal rules
7. **Effective outreach efforts:** Introducing coordinated outreach efforts between the government and the industry bodies to attract the major handset and component manufacturers to set up operations in India
8. **Design ecosystem:** Create a thriving and stable design ecosystem in the country by aiding in skilling and talent availability for mobile handset design and manufacturing

Strategy to make India the global mobile manufacturing hub

To become the global manufacturing hub for mobile handsets and components, we propose that India could introduce the following actions on each of the eight pillars.

1. Duty differential through PMP

MEITY's notification of the Phased Manufacturing Program (PMP-1) instituted a robust duty differential regime in India. Since then, a thriving handset assembly ecosystem has flourished in India. Sub-assembly localization, however, has seen limited progress beyond battery and charger/ adapters. It is recommended, therefore, that notification of further duties in the shape of PMP-2, to localize manufacturing (beyond simple assembly) of these sub-assemblies as well, be delayed until the ecosystem in India has fully matured. The duty structure should aim to incentivize domestic manufacturing and not become a tool for garnering revenues—which may be attractive in the short term but will have adverse impact on the industry in the long term.

2. Export incentives

India could strengthen its export promotion strategy for mobile manufacturing through the following measures. In the absence of these incentives, India is unlikely to capture a significant share in the export market.

- Increase in MEIS export incentives from current 4 percent with a long-term commitment from the government** to account for the difference in production cost while the supplier ecosystem in India matures (details in Annexure 1). This will encourage the local manufacturing industry to look beyond the domestic market and thus Make in India for the world. The increased scale of production will bring significant benefits in terms of larger investment, employment generation and improved trade balance.
- Institution of Services export incentive (SEIS) of 5 percent for mobile application development, testing and advertising services** in order to capture the full impact of the app economy in India. The app economy is one of the main engines pushing the mobile industry. In fact, this segment has grown substantially in China with four million mobile applications available in local language. These apps have not entered the export stream as such due to language constraints. Our suggestion is that the export of applications (apps) as evidenced by foreign exchange earnings should be incentivized by way of normal 5% incentive. SEIS claims should be dispensed automatically by a simple online system without need for going through involved procedure of Council membership and minimum turnover. Disbursement should be through the Bank or Agency which receives the export remittance. Suitable amendment to expand SEIS coverage with proper explanation may be carried out by DGFT.
- Increase in the import duty drawback rate from current 1 percent to 5-6% to reflect the increase in rate and scope of applicable PMP duties.** Revising the all industry rate for mobile manufacturing will be vital if India is to achieve the objective of 120 million units export by 2019, as current rates only partially reimburse the duties paid by the industry for exported goods (detailed calculations in Annexure 2).
- Allowance of zero-duty import of second-hand capital goods under Export Promotion Capital Goods scheme** for used equipment with at least 80 percent residual value. Fast track clearance for equipment duly certified by empanelled chartered accounts should be ensured without mandating Ministry of Environment & Forests approval.

3. Easier setup and expansion of manufacturing capacity

The setup of new manufacturing units and the expansion of existing manufacturing capacity could be made possible by easing the import of capital goods and providing low cost capital access to the industry. To do this, the following specific measures are recommended:

- Extension of the list of capital goods eligible for zero-duty import** that are used for mobile handset manufacturing: Zero duty only applies to a few capital goods such as SMT lines; all other machinery requires payment of the full basic customs duty of 7.5 percent.
- Easier capital availability for mobile manufacturing** through 5 percent interest subvention on fixed and working capital for 10 years: The latest high-volume automated machinery like SMT is extremely capital intensive. This hampers India's ability to compete with manufacturers in China or Vietnam. The amount of working capital eligible for interest subvention can be calculated based on the Incremental Capital Output Ratio and average days of working capital requirement norms for the industry. This is to ensure that inefficient operations are not rewarded.

4. Competitive direct tax policy

India needs to ensure a direct tax policy which is competitive compared to manufacturers in other leading mobile manufacturing countries. Competing countries such as Vietnam and China offer a 10 to 15 percent corporate income tax rate for up to 30 years. Therefore, we recommend a **10-year tax holiday** on a block of 15 to 20 years on all profits for mobile handset or related component manufacturing, subject to value-addition norms.

5. Labour

While the mobile handset manufacturing industry promises to generate significant employment opportunities for the people of India, special support is required both from the Central and State Governments to facilitate smooth manufacturing operations. A **significant step in this regard has been taken** by the government by **allowing the facility of hiring workers on fixed term employment contracts to all sectors**. This facility was earlier available only for the apparel manufacturing sector as per the Industrial Establishment (Standing Order) 1946. **This is a commendable step** and will improve the ease of doing business for all manufacturers in the industry. To further ease the labour related issues faced by the industry, we suggest the following additional actions for implementation.

- **Ease retrenchment of labour and closing of establishments** (Industrial Disputes Act): For the closure of any establishment having 100 or more workmen, the law mandates the establishment to obtain the approval of appropriate state government. This is very difficult, as it is not granted to avoid political repercussions. Similarly, retrenchment of excess manpower due to modernization or improvement in technology is difficult in the absence of government permission.
- **Provide greater flexibility in working hours and overtime**: Current regulations under the Factories Act stipulate that the maximum working hours per week is 48 hours and the maximum working hours per day is 9 hours for a workman. For ensuring around-the-clock operation, the current legislation forces companies to have three shifts which increases the time lost due to shift rotation and the costs incurred in transportation and other logistics. Shifting to a 12-hour per day shift will allow having just two shifts per day. Relaxations in provisions prohibiting deployment of women outside the 6 AM to 7 PM slot could be considered in this scenario as women will be leaving or entering the factories either in the morning or in the early evening.
- **Allow greater usage of apprentices for skill development**: The government's National

Apprenticeship Promotion Scheme is a great initiative to encourage skill development through the use of apprentices. However, the incentives applicable under the scheme are only available to enterprises with up to 10 percent of the total manpower strength engaged in apprenticeship. An increase in the upper cap on usage of apprentices to 30 to 40 percent is recommended for mobile manufacturing, taking cognizance of the fact that it is still a fledgling industry requiring significant skill-building efforts.

6. Ease of doing business

The following measures could be taken to vastly improve the ease of doing business for mobile manufacturers in India.

- **Reduced turnaround time at ports from days to a few hours**: Turnaround times at Indian ports should match major international ports such as Hong Kong to ensure faster and more responsive supply chains.
- **Streamlined, clear GST rules to ensure GST on all components remains at 12 percent**: The CBEC's GST notification declares that 12 percent GST is to be levied on mobile handsets and parts. Ideally subparts, i.e., parts used for the manufacture of intermediate parts which will be used for manufacture of mobile phones should also have a 12 percent GST. However, Indian Customs is not allowing such subparts to be cleared at 12 percent and is demanding higher rates of 18 to 28 percent on such items. This is very unfair and leads to blockage of GST credits. For example, parts for the manufacture of batteries and chargers are being charged a higher GST. Therefore, it is recommended that the 12 percent GST rate be applicable not just for "parts" of mobiles but also their "sub-parts, inputs, accessories and raw materials".
- **Allow iGST exemption for exports under Advance Authorization Scheme**: Currently, the government has notified exemption of iGST for exports under the Advance Authorization Scheme until September 2018. It is recommended that the exemption be allowed permanently.



- Modification of E-Waste Amendment Rules 2017 to exclude mobile handsets** as a product category till viable methods of collection and recycling are arranged: EPR targets for existing producers (whose number of years of operations is higher than the average life of their products) are unattainable due to multiple reasons—there is no take-back/collection mechanism since phones are sold unbundled and through a complex distribution network; the second-hand market in India makes it hard to determine phone ownership; and the informal sector cannibalizes parts, extracting reusable parts/connectors/ICs/semiconductor.

While the industry will have an important role to play in ensuring safe e-waste disposal, any efforts to tackle this issue will need to involve consumers as well. The government could consider setting up a “device registry” that links all the EIRs (Equipment Identity Registers) operated and maintained by the mobile phone operators. This registry can then enable digital tracking of age of the devices and also push SMS alerts to users prompting responsible disposal of older devices. Additionally, a regulatory framework similar to the auto industry (where consumers are not allowed to use vehicles after the pre-defined end of product life cycle) may be framed mandating safe disposal guidelines for end-users of older mobile devices.

7. Effective outreach efforts

We recommend the creation of a crack team comprising select officials from MeitY, DIPP, select state governments and ICEA/industry to effectively reach out to global manufacturers and promote investments in the country.

8. Design ecosystem

We recommend the **Establishment of a National Mobile Design Centre** to ensure availability of skilled personnel. This will help India expand its footprint in the design/R&D ecosystem. The centre should have the necessary testing and R&D equipment for mobile design, which could be leased to the industry on an hourly or daily basis. It would also require a team of experts in hardware, mechanical, industrial and software design. It should also have a dedicated team to regulate and certify the products designed in India.



India’s resurgence as a manufacturing hub for mobile phones is a gradual and promising step to becoming a global manufacturer of smartphones and components. While the support of the PMP policy has helped India re-establish its position as a manufacturer of mobile phones for India, a strategic focus on the other action areas recommended by the India Cellular and Electronics Association (ICEA) could launch India onto the global platform—making it a competitive force at par and perhaps superior to other mobile manufacturers for the world.

VI Annexure 1 - MEIS export incentive

The Indian mobile manufacturing industry has so far been unable to capture the export market, which remains loss making for the industry due to severe competition from China and Vietnam. Some of the major competitive advantages for manufacturing firms in China and Vietnam are a well-developed component ecosystem, heavily subsidized and government incentives-driven environment and superior infrastructure availability. These factors contribute to a higher cost of production in India, making our exports globally uncompetitive.

Indian manufacturers suffer from cost disabilities across the value chain as compared to China and Vietnam (Exhibit 17).

mobile phones and some parts was increased from 2 percent to 4 percent by the government w.e.f December 2017. The increased rate is applicable on exports till 30 June 2018. However, a further increase in the MEIS incentive is proposed to fully account for the disadvantages suffered by Indian manufacturers. Additionally, we request the government to signal a long-term commitment to the increased rates–this could provide a stable view of the incentives structure to the industry and thus attract new investments in India.

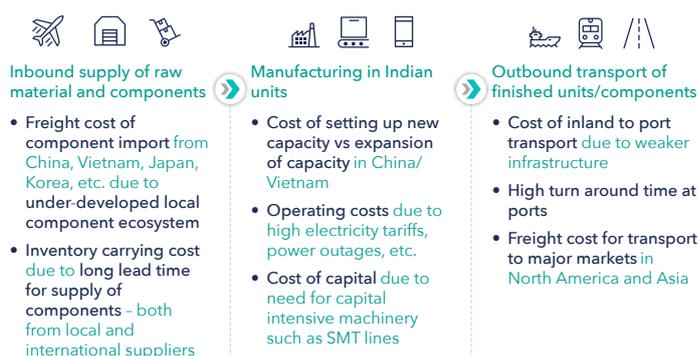
Such strong support from the government could help India to become a global leader in mobile manufacturing resulting in significant trade balance surplus. As per an ICEA analysis, the share of exports in India's mobile manufacturing could reach 60 to 65 percent by 2025 (shown in the table on the following page).

Additionally, manufacturing for the export market could create up to 47 lakh direct and indirect jobs in the country by 2025 as opposed to just 18 lakh jobs if we fail to kickstart exports and just manufacture for the domestic market. Thus, this initiative could bring significant benefits to the Indian economy.

Below is a detailed account of all the major cost disadvantages incurred by manufacturers in India, which would be addressed by the higher MEIS incentive.

EXHIBIT 17

Cost disadvantages for mobile manufacturing in India



To provide relief to Indian manufacturers, the MEIS incentive on mobile phones and some parts was increased from 2 percent to 4 percent by the government w.e.f December 2017. The increased rate is applicable on exports till 30 June 2018. However, a further increase in the MEIS incentive is proposed to fully account for the disadvantages suffered by Indian manufacturers. To provide relief to Indian manufacturers, the MEIS incentive on

1. Inbound supply of raw material and components

Indian manufacturers suffer due to the high cost of inbound raw material and components for two primary reasons:

- High air freight cost on import of components:** The Phased Manufacturing Program ensures that mobile phone sub-assemblies are localized in India. While the local component manufacturing ecosystem develops over

Year	Handsets produced in India (Million units)	Export of handsets (Million units)	% share of exports over India manufactured handsets
2018 (P)	350	70	20%
2019 (P)	500	120	24%
2020 (P)	600	280	47%
2021 (P)	720	375	52%
2022 (P)	850	475	56%
2023 (P)	980	575	59%
2024 (P)	1,100	680	62%
2025 (P)	1,250	790	63%

the next few years, these will continue to flow into India from countries like China, Japan, Vietnam and Korea (mostly by air). According to ICEA estimates, the freight cost on imported components can range between 1 percent and 3 percent of the export FOB value per unit.

- **High inventory-carrying cost due to long lead times:** The supply of components to Indian manufacturers involves much longer lead times and therefore higher inventory-carrying costs compared to China and Vietnam for three primary reasons:
 - i. **Lack of geographical proximity to international component manufacturing ecosystem:** The mobile components manufacturing ecosystem is concentrated in Japan, South Korea, Vietnam, Taiwan and China, ensuring it reaches China and Vietnam much faster than India.
 - ii. **Slow turnaround time at Indian ports:** The slow turnaround time at India's ports is a major disadvantage compared to China and Vietnam. According to data from the World Bank Logistics Performance index (2016), it takes an average of 2.2 days to clear a shipment in India as compared to 1 day in Hong Kong and 1.3 days in Vietnam. Some of the major contributors to the high turnaround times are issues such as port congestion, customs clearance, shipping line issues and charges, documentation and paperwork and regulatory clearances¹. Several admirable steps have been taken in this regard by the Government of India including introduction of the single window clearance

system for customs, elimination of manual forms, direct port delivery, installation of container scanners at ports, RFID based automation system etc. Sustained monitoring and implementation of these initiatives could help Indian ports catch up to global leaders.

- iii. **Weak domestic transport infrastructure:** Even the locally sourced components in India have high lead time due to weak rail and road infrastructure. For instance, the average speed of trucks in India is just 30 to 40 kmph as compared to the global average of 60 to 80 kmph². This means that the lead time for road transport in India is double that of the global average. This pushes up inventory-carrying costs for India-based manufacturers.

2. Manufacturing in India

Mobile manufacturing units in India suffer from several cost disadvantages.

- **Cost of setting up new capacity in India:** To become a global mobile manufacturing hub, India will need to attract global manufacturers who have already established manufacturing bases in China and Vietnam. Significant costs are incurred in setting up new manufacturing capacity in India due to:
 - i. **Infrastructure costs:** Factories for phone manufacturing need a large footprint and therefore have high costs for land acquisition and building infrastructure. For example, a plant with a capacity of 1 million smartphones per month requires 25,000 sq. ft. of actual production area.

1 Dun and Bradstreet report, "Port Logistics and issues & challenges in India"

2 Avendus report "Re-architecting the nervous system of the economy" (2016)

A conservative cost estimate of USD 30 to 35 per sq. ft. yields an estimate of about USD 1 million for a mid-sized plant. This cost could go up to USD 5 million for a larger plant.

- ii. **Cost of machinery and equipment:** Mobile manufacturing involves heavy usage of high volume automated machinery, which means setting up new operations in India represents significant cost investment for manufacturers. A simple APTP (Assembly, Programming, Testing and Packaging) plant with capacity of 1 million units per month requires 5 to 6 assembly lines, with each costing about USD 0.3 million. A mid-sized plant therefore requires an investment of USD 2 million just for assembly operations. For a large plant manufacturing high-end smartphones, this number could easily touch USD 20 million

Furthermore, installing more cutting-edge equipment such as surface mount technology is required to locally manufacture mobile components to meet PMP requirements. Thus, the actual investment required in machinery and

equipment is several times larger than the USD 2 million to 20 million needed just to set up assembly operations.

- iii. **Cost of training engineers and operators:** Mobile manufacturing requires stringent quality and production standards, which translate to a long ramp-up time for manufacturing engineers and operators. A large amount of money thus needs to be spent on engineer and operator training in India, unlike in China and Vietnam, where the well-established electronics manufacturing industry makes it much easier to source experienced and skilled talent.

Operating costs: Mobile manufacturing in India involves high operating costs due to higher electricity tariffs and frequent power outages. Despite recent improvement in the electricity tariff in a few states, the overall electricity tariff in India is still around 60 percent higher than China and Vietnam, as seen in the following table.

The table also shows how the higher frequency and duration of power outages in India lead to even greater costs for Indian manufacturers due to captive power generation. The high cost of diesel in India leads to a USD 0.20 to 0.25 per kWh cost of diesel power generation, which is over three times the electricity tariff in China and Vietnam. The infrastructure costs associated with captive power generation are even higher due to the need for purchase and maintenance of high capacity industrial generators.

- **Cost of capital:** Mobile manufacturing is a highly capital-intensive industry due to the need to install the latest high-volume machinery (such as SMT). ICEA estimates suggest that setting up a mid-sized handset assembly plant for a mid-range smartphone with a capacity of 1 million units per month requires a total investment of USD 5 million. The investment required to set

Country	Absolute electricity tariff in 2016 ¹ (US cents per kWh)	System Average Interruption Duration Index ² (Hours per customer per annum)	System Average Interruption Frequency Index ¹⁰ (Frequency per customer per annum)
India	12.0	84.2	131.8
China	7.5	17.1	3.57
Vietnam	7.4	27.6	10.6

1 Maharashtra Discom (for India), CEIC (for China) and Electricity of Vietnam company (for Vietnam)
 2 Ministry of Power (URJA dashboard), Electricity of Vietnam company (EVN) and China Electronics Corporation (CEC)

Global handset retail sales revenue split by region ¹		
Region	2017 retail sales revenue (USD millions)	Share of global total (%)
Western Europe	58.8	12.6%
Central & Eastern Europe	18.1	3.9%
USA/ Canada	88.9	19%
Latin America	37.1	7.9%
Africa & Middle East	35.9	7.7%
Asia Pacific	229.1	49.0%
Total	467.9	100%

1 IDC Mobile Phone Tracker data

up local component manufacturing is also several times higher. In such a scenario, the high lending rates in India (average of 9.7 percent in 2016 according to the World Bank) compared to China (4.3 percent) and Vietnam (7.0 percent) have severely hamstrung exports from India.

3. Outbound transport of finished units/components

The cost of exporting finished units/ components from India is also higher due to the high cost of outbound transport. Several factors are responsible for this:

- High freight cost for transport to major markets in North America, Europe and Asia:** India's mobile manufacturing industry suffers in the export market due to the high freight costs involved in accessing the most lucrative markets in Europe, North America and Asia. Western Europe, USA/ Canada and Asia Pacific (primarily China, Japan and South Korea) together account for more than 80 percent of the global mobile handsets market revenue.

Despite having an advantage in terms of lower air freight costs in accessing the African and Middle Eastern markets, Indian manufacturers are at a major disadvantage in accessing the more lucrative markets. This is because China and Vietnam have well-established and direct commercial air freight routes to these markets whereas shipments from India need to be routed through hubs like Hong Kong.

- Logistics cost for inland to port transport:** India's weak inland transport infrastructure

adds a significant logistics cost burden for Indian manufacturers. Given the inland location of the primary hubs for mobile manufacturing in India (UP, Uttarakhand, Haryana, Delhi and Telangana), transporting finished goods to major ports for shipping to export markets requires significant inland transport. Logistics costs account for a significant part of the Indian non-services GDP, estimated at 19 percent of GDP, with a value of USD 375 billion, versus 10 to 15 percent for most comparable countries as seen in the table below³.

S.No	Country	Logistics cost as % of GDP
1	India	19%
2	China	12.5%
3	Indonesia	15.7%
4	UK	13.4%

Several structural reasons are responsible for the high logistics cost in India:

- i. High freight rates:** Freight rates in India are much higher than in comparable economies. For example, rail freight rates in India are 4 times more than China in purchasing parity terms. Similarly, road transport in India is also quite expensive, costing INR 2 to 3 per tonne per km. A major reason behind the high freight rates is the high cost of fuel in India. A litre of diesel in India costs around USD 1 compared to USD 0.7 in Vietnam.

3 Sagarmala "Ports to Prosperity" report (2016)





- ii. Modal mix skewed towards more expensive road transport:** Poor inter-modal connections skew India's modal mix towards road transport with a 60 percent share of total BKTm (Billion Tonne KM) compared to just a 14 percent share in China⁴, even though road transport is around twice as expensive as rail transport and 10X the cost of inland waterways.
- iii. Poor infrastructure creating long lead times:** Both rail and road transport, which together account for more than 90 percent of freight traffic in India, are plagued by delays and thus long lead times. For example, the variable quality of roads and presence of choke points restrict the average speed of commercial road transport in India to just 30 to 40 km/hr⁵.
- iv. Industrial planning not linked to port infrastructure:** The industrial clusters and zones are often not close to major ports. Export containers in India travel 4 to 5 times the distance between production centres and ports compared to China⁶.
- **High turnaround times at customs:** The slow turnaround time at India's ports is a major disadvantage for Indian exporters. According to World Bank data, the average time for clearance at Indian ports is about twice that of Vietnam and Hong Kong.

4 Avendus report "Re-architecting the nervous system of the economy" (2016)

5 Avendus report "Re-architecting the nervous system of the economy" (2016)

6 Sagarmala "Ports to Prosperity" report (2016)

VI Annexure 2 - Import duty drawback

The current duty drawback scheme provides for a drawback rate of 1 percent for mobile handset and component exports, which is the default rate for every packaged export. However, as per the PMP policy, the number of duty eligible components has increased every year since 2016-17. The schedule of duty eligibility as per the PMP notification issued by MEITY is reproduced below.

- a. 2016-17: (i) Charger/Adapter (ii) Battery Pack (iii) Wired headset
- b. 2017-18: (iv) Mechanics (v) Die cut parts (vi) Microphone/Receiver (vii) Key pad (viii) USB cable
- c. 2018-19: (ix) Printed circuit board assembly (x) Camera module (xi) Connectors
- d. 2019-20: (xii) Display assembly (xiii) Touch panel/cover glass assembly (xiv) Vibration motor/ringer

According to the notification, a 10 percent customs duty was to be applicable on the import of any of these components. The Union budget 2018-19, however, announced by the Hon'ble Finance Minister, increased the customs duty on the components under a) and b) above from 10 percent to 15 percent. It also introduced a duty of 10 percent on PCBA and moulded plastics for chargers/adapters.

This has increased the rate and coverage of the applicable PMP duties. With the imposition of basic duty on mobiles as well as the major components under PMP, the incidence of custom duty in the Bill of Material (BOM) has gone up to 10-12% of the total cost. Thus, we recommend an increase in the all industry rate to an appropriate rate, based on actual localization, which in our opinion will be between 5-6% for mobile phones to reflect the impact of PMP on the BOM. (An analysis for an appropriate duty draw back rate on chargers will also have to be done since there is duty on parts pf chargers also).

S. No.	HS Code	Sub-assembly	% in BoM value	Drawback Rate	Ref in DBK Schedule	BCD	Drawback Rate as input*
A	B	C	D	E	F	G	GxD
Final Products							
1	85171210, 85171290	Mobile Phone	100%	1%	8517	20%	20%
Inputs							
1	85171210, 85171290	Mobile Phone	100%	1%	8517	20%	20%
Inputs							
1	85177010	PCBA	47.00%	1%	8517	10%	4.70%
2	85177090	Display	15.00%	1%	8517	10%	1.50%
3	73181500 73269099	Mechanics	5.00%	2%	7318 732699	15%	0.75%
4	85177090	Connectors	5.00%	1%	8517	10%	0.50%
5	85177090	Touch screen	5.00%	1%	8517	10%	0.50%
6	85177090, 85258020, 85258090, 85299090	Camera Module	4.60%	1%	8517, 8525, 8529	10%	0.46%
7	85076000	Battery	3.70%	2%	8507	15%	0.55%
8	85044030	Charger/Adapter	3.00%	2%	8504	15%	0.45%
9	85181000 85182900	Acoustics	2.00%	1%	8518	15%	0.30%
10	85183000	Wired headset	1.30%	1%	8518	15%	0.195%
11	85011011	Vibrator	0.80%	2%	8501	10%	0.08%
12	85442010	Cables	0.60%	NA	8544	15%	0.090%
13	40169990	Others e.g., Microphone Rubbercase, Sensor Rubber case/Sealing Gasket including sealing etc.	7.00%	1.50%	401699	20%	1.40%
							11.475%

*Assume 100% of Input Suffers BCD

Additionally, the drawback has lost attraction with the recent exclusion of IGST in the all-industry rate calculation. The system of refunds in place based on actual IGST suffered by the inputs going into the export product has not been working very well and created major issues for the industry. Thus, we also recommend a resolution of this issue by including IGST in the all industry rate calculation.



ICEA

INDIA CELLULAR
AND ELECTRONICS
ASSOCIATION

Indian Cellular and Electronics Association

207 Kanchenjunga Building
18 Barakhamba Road Connaught Place
New Delhi, 110001, India

Phone: +91 11 41520586

Website: www.icea.org.in

ICEA CONFIDENTIAL