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Government of India
Ministry of Electronics and Information Technology**

New Delhi, Dated: 25th February, 2019

NOTIFICATION

Subject: National Policy on Electronics 2019 (NPE 2019)

1. PREAMBLE

1.1. Electronics industry is the world's largest and fastest growing industry and is increasingly finding applications in all sectors of the economy. The Government attaches high priority to electronics hardware manufacturing and it is one of the important pillars of both "Make in India" and "Digital India" programmes of Government of India. Besides the economic imperative, focus on electronics hardware manufacturing up to the integrated circuit or chip level is required due to the growing security concerns. The ESDM industry is of strategic importance as well. India is a signatory to the Information Technology Agreement (ITA-1) of WTO and Free Trade Agreements (FTAs) with various countries/ trading blocs such as ASEAN, Korea and Japan. However, the electronics hardware manufacturing sector faces lack of level playing field vis-à-vis competing nations on account of several disabilities which render domestic electronics hardware manufacturing uncompetitive. These *inter-alia* include lack of adequate infrastructure, domestic supply chain and logistics; high cost of finance; inadequate availability of quality power; inadequate components manufacturing base; limited design capabilities and focus on R&D by the industry; and inadequacies in skill development.

- 1.2. Building India's capacity in core technology development (Design and Intellectual Property (IP)) requires deeper consideration. It is noteworthy that standards development, product design or IP development (semiconductor/ systems) and semiconductor manufacturing are increasingly becoming important and improving India's participation in this league must be a major priority for the country, at least from the national security angle. In the case of building Design and IP based technology companies, the large investments needed and difficulty in competing with established Multinational Corporations (MNCs) is a significant barrier. Building semiconductor fabrication capabilities in India is essential to break into this segment.
- 1.3. Recognizing the electronics sector's unique dynamics, significant opportunities, and structural challenges, the Government of India notified the National Policy on Electronics in 2012 (NPE 2012), which provided a road map for the development of electronics sector in the country. The Policy is holistic, investor-friendly and market-driven, and focused on upgradation of infrastructure, providing incentives to offset disabilities, promoting innovation and human resource development. Schemes such as Modified Special Incentive Package Scheme (M-SIPS) to provide financial incentives across the ESDM value chain to compensate for cost disability in manufacturing; Electronics Manufacturing Clusters (EMC) for providing world-class infrastructure and logistics; mandating safety standards; rationalization of tariff structure and providing preference to domestically manufactured electronic products in Government procurement under the aegis of the Public Procurement Order 2017, are under implementation. As a result, ESDM industry has witnessed significant upward growth in India and has the potential to become a vehicle of economic growth and development.
- 1.4. The Modified Special Incentive Package scheme (M-SIPS), launched in 2012, provides capital subsidy of 25% for electronics industry located in non-SEZ areas and 20% for those in SEZ areas. Under M-SIPS, 419 investment proposals involving investment of INR 1,13,089 crore have been received till 31.12.2018. Out of these 419 applications, 197 applications with proposed investment of approximately INR 41,791 crore have been approved; 19 applications with

proposed investment of approximately INR 14,764 crore have been recommended by the Appraisal Committee for approval and 203 applications with proposed investment of INR 56,534 crore are under appraisal. Out of 197 units which have been approved, 134 units have commenced commercial production. Total capital investment reported by these companies is INR 9,961 crore. These 134 units have reported total sales of INR 74,921 crore, out of which goods worth INR 16,418 crore have been exported. The revenue paid to the Government on production by these units is INR 9,020 crore. As per Quarterly Progress Reports received from approved applicants, employment generated by these units so far is 66,555 (direct and indirect).

The Electronics Manufacturing Clusters (EMC) Scheme, also launched in 2012, encouraged entities, including State Government entities, to provide good quality infrastructure within a cluster. Under the scheme, 50% of the project cost for Greenfield EMC and 75% for Brownfield EMC is given as grant. So far, 20 Greenfield EMCs and 3 Brownfield EMC projects have been sanctioned with the project outlay of INR 3,898 crore, including INR 1,577 crore from the Government of India as Grant-in-aid. Under this scheme, 3,565 acres of land is being developed in Electronics Manufacturing Clusters with likely investment of about INR 54,836 crore by the manufacturers.

In order to promote startups and innovation, a scheme called Electronics Development Fund (EDF) was launched. EDF is a Fund of Funds which invests in Venture Funds, which in turn invests in ventures/ Startups in the area of Electronics, Nano-electronics and IT. At least 50% of the corpus has to be invested in Ventures working in ESDM sector. EDF will be investing in 13 Daughter Funds. The total targeted corpus of these 13 Daughter Funds is INR 6,950 crore and the amount committed by EDF to these 13 Daughter Funds is INR 857 crore.

- 1.5. The global electronics production is estimated to be USD 2 trillion (approximately INR 1,30,00,000 crore) in 2017. Indian electronics hardware production has increased from INR 1,90,366 crore in 2014-15 to INR 3,87,525 crore (approximately USD 59 billion) in 2017-18, registering a Compound Annual Growth Rate (CAGR) of 26.7%, as against a growth rate of 5.5% in 2014-15.

India's share in the global hardware electronics production is about 3%. The share of domestic electronics production in India's GDP is 2.3%. The import of electronic goods was of the order of USD 53 billion (approximately INR 3,44,500 crore) in 2017-18. With the demand for electronics hardware expected to rise rapidly to about USD 400 billion (approximately INR 26,00,000 crore) by 2025, India cannot afford to bear a huge foreign exchange outgo on import of electronics alone. This is both an opportunity and a challenge for the electronics sector. Opportunity to be a global leader and challenge to address a severe Balance of Payments (BoP) problem, which cannot be addressed by manufacturing for India alone. This calls for measures to promote large eco-system for domestic manufacturing, a special emphasis on exports and increasing domestic value addition. Specific policy initiatives are required to meet these objectives.

- 1.6. The production of Mobile Handsets, LCD/ LED TVs and Light Emitting Diode (LED) Products in the country has gone up significantly, and over the last few years, the demand of these electronic products is increasingly being met out of domestic production. The production of LCD/ LED TVs has gone up from 0.87 crore units in 2014-15 to 1.6 crore units in 2017-18. The production of Light Emitting Diode (LED) Products has gone up from INR 2,172 crore in 2014-15 to INR 9,630 crore in 2017-18. However, the value addition continues to be low in the absence of a vibrant components manufacturing ecosystem in the country. The Phased Manufacturing Programme (PMP) for mobile handsets and related sub-assemblies/ components manufacturing has been implemented with the objective of progressively increasing the domestic value addition for establishment of a robust Cellular mobile handsets manufacturing eco-system. As a result, India has rapidly started attracting investments into this sector and Cellular mobile handsets manufacturing has emerged as a flagship sector in the electronics manufacturing space. In 2017-18, the production of Cellular mobile handsets reached approximately INR 1,32,000 crore, compared to INR 18,900 crore in 2014-15. Production of Cellular mobile handsets in volume terms reached 225 million (22.5 crore) units in 2017-18, as compared to production of 60 million (6 crore) units in 2014-15. As many as 268 manufacturing units for Cellular mobile handsets and

their parts/ components have been set up in the country during the last 3-4 years, resulting in estimated employment for about 6.7 lakh persons (direct and indirect).

- 1.7. Implementation of the Schemes/ Programmes under the aegis of NPE 2012 has successfully consolidated the foundations for a competitive Indian ESDM value chain. The Government now seeks to build on that foundation to propel the growth of ESDM industry in the country. The NPE 2019, prepared after extensive stakeholder consultation, including the industry, industry bodies, key Ministries/ Departments of Government of India and State Governments, is conceived for this purpose.

2. VISION

To position India as a global hub for Electronics System Design and Manufacturing (ESDM) by encouraging and driving capabilities in the country for developing core components, including chipsets, and creating an enabling environment for the industry to compete globally.

3. MISSION

- 3.1. Promote domestic manufacturing in the entire value-chain of ESDM, including core components and materials to increase the domestic value addition and reduce dependence on import of electronic goods by focusing on skill, technology, scale and the global market.
- 3.2. Strengthen India's linkages with global trade, integrate with global value chains and build facilitative programmes and incentive framework to boost Indian ESDM exports.
 - 3.2.1. Transform India into a destination for manufacturing and exports in pre-identified, high growth electronics sector by encouraging and incentivizing large ESDM eco-system to achieve net positive Balance of Payments.

- 3.3. Develop capacities for manufacture in all sub-sectors of electronics, including semiconductor facilities and display fabrication facilities, and create a vibrant and dynamic fabless chip design eco-system in the country.
- 3.4. Build a risk-management eco-system to promote and create a framework for a comprehensive start-up eco-system with focus on development of products, key components and technologies, based on emerging technological landscapes.
- 3.5. Promote ease of manufacturing by introducing new/ innovative fiscal incentives and augmenting the existing ones for the ESDM industry to make electronics manufacturing in India globally competitive.
- 3.6. Ensure effective measures for protection to the domestic ESDM industry from dumping of electronics goods.
- 3.7. Promote R&D to develop electronic products, including associated design and creation of Intellectual Properties, for the domestic as well as global markets.
- 3.8. Incentivize and facilitate establishment of global bases for manufacturing of components and sub-assemblies in India.

4. OBJECTIVES

- 4.1. Promote domestic manufacturing and export in the entire value-chain of ESDM for economic development to achieve a turnover of USD 400 billion (approximately INR 26,00,000 crore) by 2025. This will include targeted production of 1.0 billion (100 crore) mobile handsets by 2025, valued at USD 190 billion (approximately INR 13,00,000 crore), including 600 million (60 crore) mobile handsets valued at USD 110 billion (approximately INR 7,00,000 crore) for export.
- 4.2. Improve ease-of-doing Business for the ESDM industry.
- 4.3. Encourage industry-led R&D and innovation in all sub-sectors of electronics.

- 4.4. Promote and create a framework for comprehensive Start-up eco-system in emerging technology areas such as 5G, IoT, Artificial Intelligence, Machine Learning, Drones, Robotics, Additive Manufacturing, Photonics, Nano-based devices etc., and their applications in areas such as defence, agriculture, health, cyber security, smart cities and automation, with special focus on solving real-life problems.
- 4.5. Provide incentives and support for significantly enhancing availability of skilled manpower, including re-skilling, in the ESDM sector.
- 4.6. Provide fiscal incentives and support for export-led growth, including significantly enhancing economies of scale in electronics manufacturing.
- 4.7. Develop core competencies in all the sub-sectors of electronics, including *inter-alia* electronic components, sub-assemblies and semiconductors, telecommunication and broadcasting equipment, IT hardware, medical electronics, defence and strategic electronics, automotive electronics, industrial electronics, consumer electronics, etc., and fabless chip design.
- 4.8. Become a global leader in the Electronics Manufacturing Services (EMS) segment by promoting progressively higher value addition in manufacturing of electronic products.
- 4.9. Provide policy support and special package of incentives for highly capital intensive projects.
- 4.10. Drive indigenization in the microchips used by strategic and critical infrastructure sectors viz., defence, space, atomic Energy, telecommunications, broadcasting, aviation, power, etc., through design and production of such microchips.
- 4.11. Create specialized governance structures within the Government to cater to specific needs of the ESDM sector, in view of fast changes in technology and business models.

- 4.12. Facilitate loans to the industry at competitive rates for setting up or expansion of electronics manufacturing units.
- 4.13. Promote research, innovation and support to the industry in the areas of packaging, interconnects and micro photonics, as a long term measure to counter the problems posed by the continued use of Silicon, like the limit of scaling and dark Silicon.
- 4.14. Encourage and incentivize Transfer of Technology (ToT) for core technologies.
- 4.15. Promote research, innovation and support to industry for green processes and sustainable e-Waste management, including *inter-alia* facilitation of citizen engagement programmes for safe disposal of e-Waste in an environment friendly manner, development of e-Waste recycling industry and adoption of best practices in e-Waste management.

5. STRATEGY

Ministry of Electronics and Information Technology (MeitY) will coordinate with the concerned Ministries/ Departments to provide support to industry for rapid and robust expansion of electronics hardware manufacturing within the country. MeitY shall work out details and facilitate decisions by the Government on the measures indicated hereunder:

Creating eco-system for globally competitive ESDM sector

- 5.1. Create eco-system for globally competitive ESDM sector by incentivizing domestic manufacturing and exports to compensate for disabilities:
 - 5.1.1. Encourage domestic manufacturing of electronic products and their inputs (parts, sub-assemblies and components) for significantly increasing value addition by building a comprehensive ecosystem, covering the entire supply chain, through suitable incentive mechanisms and fiscal interventions, including phased manufacturing programmes, and removal of anomalies.

- 5.1.2. Devise suitable methods for promotion of manufacturing of electronic goods covered under the Information Technology Agreement (ITA-1) of WTO.
- 5.1.3. Provide suitable tax benefits for the ESDM sector.
- 5.1.4. Formulate suitable schemes and incentive mechanisms to encourage new units and expansion of existing units in electronics manufacturing sector.
- 5.1.5. Exploring the possibility of leveraging Defence Offsets, in consultation with the Department of Defence Production (DDP), for development of electronic components manufacturing.
- 5.1.6. Provide support for infrastructure development through formulation of a new scheme or suitable modifications in the existing Electronics Manufacturing Clusters (EMC) scheme, for supporting both Greenfield and Brownfield manufacturing clusters. This shall include leveraging the existing/ upcoming industrial clusters/ manufacturing zones/ corridors in the country, with provision for ready-built factories, for attracting investment in complete value chain of identified verticals.
- 5.1.7. Exempt the import duty on identified capital equipment, not being manufactured in the country, to reduce capital expenditure for setting up of new units/ expansion of existing electronics manufacturing units.
- 5.1.8. Promote a forward looking and stable tax regime, including advance intimation to the industry to plan their investments in the form of Phased Manufacturing Programme (PMP) in various segments of electronics, with a sunset clause.
- 5.1.9. Develop manufacturing capacities for high performance computing.
- 5.1.10. Provide support for Micro, Small and Medium Enterprises (MSME) in ESDM sector.

- 5.1.11. Promote domestic capital goods industry for manufacture of capital goods for electronics industry.
- 5.1.12. Provide suitable mechanism to generate resources for promotion of certain critical sub-sectors of electronics manufacturing such as semiconductor facilities and display fabrication units.
- 5.1.13. Provide a framework for supplying electronic units/ systems for National Critical Infrastructure from domestic industry with indigenous technology.

Developing and Mandating Standards

- 5.2. Set up and promote standards development framework for developing standards, based on global benchmarks, for electronics (including components as well as fabless industry), IT, e-Governance, etc.
- 5.3. Promote and support contributions and participation of domain experts from Government, academia, start-ups and industry in national and global standards forums.
- 5.4. Set up an institutional mechanism within MeitY for mandating compliance to standards for electronics products.
- 5.5. Create/ upgrade lab infrastructure/ capacity for testing of electronic goods, including cyber security.

Ease-of-doing-Business

- 5.6. Strengthen and leverage Invest India, the National Investment Promotion and Facilitation Agency, which was established as a single window for global investors, for facilitation of investment in ESDM sector as a one-stop shop for facilitation of investments / businesses, coordination with the State Governments, establishment of joint ventures, obtaining speedy approvals by coordinating with the concerned Government agencies on behalf of the investors, and hand-holding them till the units become functional.

Industry-led R&D and Innovation

5.7. Encourage industry-led R&D and innovation in all sub-sectors of electronics:

- 5.7.1. Promote path-breaking research, grass root level innovations and early stage Start-ups in emerging technology areas such as 5G, IoT/ Sensors, Artificial Intelligence (AI), Machine Learning, Augmented Reality (AR) and Virtual Reality (VR), Drones, Robotics, Additive Manufacturing, Gaming and Entertainment, Photonics, Nano-based devices, as well as thrust areas such as medical electronics, defence and strategic electronics, automotive electronics, cyber security, power electronics and automation, having major economic potential, with a special focus on applying the outcomes, including frugal solutions, to solve real-life problems. Towards this, in addition to premier institutes like IITs, NITs, IIITs, and Central Universities, the institutes in small cities shall also be encouraged. Chairs in premier institutions will be established for focused research in the aforesaid emerging technology areas and thrust areas of electronics.
- 5.7.2. Provide support for setting up of Incubation Centres/ Centres of Excellence (CoE) and strengthening/ re-orienting the focus areas of the existing centres to suit the current and future research requirements in the aforesaid emerging technology areas and thrust areas of electronics.
- 5.7.3. Provide support for start-ups in these emerging areas/ technologies, from supporting the concept to development/ prototyping of products, including the complete value chain.
- 5.7.4. Formulate joint strategy and action plan along with industry, academia and R&D organizations to identify core technologies and develop, acquire/ pool Core and Peripheral IPs, and make them available to the industry.
- 5.7.5. Create Sovereign Patent Fund (SPF) to promote the development and acquisition of IPs in ESDM sector.

- 5.7.6. Provide support for generation of Intellectual Property (IP) and Patents, including through outsourced R&D.
 - 5.7.7. Set up framework for creation of an ecosystem for promoting design and IP in the country.
 - 5.7.8. Facilitate interaction between academia (including Atal Tinkering Laboratories (ATLs) in schools across India, which aim to foster curiosity, creativity and imagination in young minds; and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing, etc.) and industry to create and share IPs/ prototypes resulting from R&D programmes. An agency to provide linkage between academia/ research institutes and industry shall be identified. After reviewing its progress, more such agencies would be set-up at regional levels.
 - 5.7.9. Set up a framework for incorporating principles of sustainability and environmentally sound management of electronic goods throughout their life cycle, across all sub-sectors of electronics, from the design, production to end-of-life disposal.
- 5.8. Academia and freelancer-led R&D and innovation: Creation of facilities to house best-in-class fabrication, testing and analysis equipment, accessible to students, freelancers and academicians to build, test and improve their prototypes.

Human Resource Development

- 5.9. Provide support for significantly enhancing the availability of skilled manpower in the ESDM sector:
 - 5.9.1. Strengthening/ leveraging the existing manufacturing, research, design and development hubs for promoting design and innovation in the field of electronics.

- 5.9.2. Work closely with Government, industry, academia, universities and other institutions of learning and to design programmes to ensure availability of adequate skilled manpower to the industry.
- 5.9.3. Provide support for skill development for emerging technology areas such as 5G, IoT/ Sensors, Artificial Intelligence (AI), Machine Learning, Augmented Reality (AR) and Virtual Reality (VR), Drones, Robotics, Additive Manufacturing, Gaming and Entertainment, Photonics, Nano-based devices, as well as for thrust areas such as medical electronics, defence and strategic electronics, automotive electronics, cyber security, power electronics and automation at the faculty and student levels.
- 5.9.4. Generate skilled manpower/ research base at Post Graduate/ Ph.D. level to work in emerging technology areas by devising a suitable scheme to support innovation in aforesaid emerging technology areas.
- 5.9.5. Provide support to Indian Ph.D. and Post-Doctoral scholars for carrying out their research work through deputation to foreign institutions for a period of upto 2 years with a provision for holding Joint IPR(s), if the research is undertaken jointly with the foreign institution(s), subject to the condition that they will serve in India for next 5 years.
- 5.9.6. Formulate schemes in partnership with the Ministry of Human Resource Development, State Governments, National Skill Development Corporation (NSDC), Electronics and Telecom Sector Skill Councils, National Institute of Electronics and Information Technology (NIELIT), Premier Institutes, etc., targeted specifically at job creation and bridging the skill gap to provide skilled manpower to the industry.

Export Promotion

- 5.10. Provide attractive package of incentives for promoting export of electronics goods, thereby empowering the exporters by facilitating global market access.

Trusted Electronics Value Chain

5.11. Promote trusted electronics value chain initiatives to improve national cyber security profile and control its supply chain across national defence (military, intelligence, space) and critical national infrastructure (energy grids, communication networks, digital economy, etc.).

Cyber Security

5.12. Enhance understanding of cyber security issues/ concerns, risks and mitigation measures thereof pertaining to electronic products.

5.13. Encourage development of adequate capacities for testing.

5.14. Encourage use of IT products tested and evaluated for security, based on standards like Common Criteria/ ISO 15408.

5.15. Promote the use of secure chips to reduce cyber security risks.

5.16. Promote start-up eco-system for development of photonics, nano-based devices and cyber security products.

Promotion of Electronic Components Manufacturing Ecosystem

5.17. Provide incentives and support for manufacturing of core electronic components (both active and passive, including bare PCBs, PCB laminates, chip components, connectors, wound components, switches, relays, ferrites, etc.), lithium-ion cells (and such other cells that may be commercialized in future with advancement of technology) for electronics/ EV applications, fuel cells, preform of silica, optical fibre, solar cells, raw materials for electronic components, etc., and ATMP of semiconductors.

Mega Projects

- 5.18. Provide special package of incentives for mega projects which are extremely high-tech and entail huge investments, such as semiconductor facilities (including trusted foundries), display fabrication, photonics and LED chip fabrication units, including according infrastructure status to these units.
- 5.19. Promote investment in mega facilities abroad, such as an existing semiconductor facility, including support for setting up of R&D units abroad, where an ecosystem exists for a particular technology.

Preferential Market Access

- 5.20. Encourage the State Governments to adopt the Public Procurement (Preference to Make in India) Order 2017 (PPO 2017), in procurement of electronic, including cyber security products.
- 5.21. Leverage Government e-Market Place (GeM) to create/ expand the market for domestically manufactured electronic products.

Developing core competencies in the sub-sectors of Electronics

- 5.22. Provide special support for developing core competencies in the following sub-sectors:

5.22.1. Promotion of Fabless Chip Design Industry

- 5.22.1.1. Enable a multi-fold growth of Indian fabless chip design industry by providing requisite support in form of Electronic Design Automation (EDA) tools and FAB support for early-stage startups.
- 5.22.1.2. Emulation/ rapid prototyping infrastructure at certain locations that is accessible to all fabless start-ups in the country.

- 5.22.1.3. Provide support under the PPO 2017 to indigenously designed integrated circuits, Module-on-Chips, System-on-Chips, semiconductor IP licenses, all associated systems and application software products including software IP licenses, where IP is resident in India.
- 5.22.1.4. Provide support for Indian fabless industry through Venture Capital (VC) funding and through positive market intervention, driven through a dedicated nodal agency, including establishing “India Fabless Semiconductor Venture Fund” to directly invest in early-stage seed capital and venture equity capital exclusively in Indian fabless semiconductor companies with special focus on companies creating indigenous semiconductor-centric IPs.
- 5.22.1.5. Set up Incubation Centres/ Centres of Excellence (CoEs) in the country which shall provide necessary EDA tools, IPs, prototypes and ATMP facilities required for start-ups.
- 5.22.1.6. Broaden the VLSI Design base in the country by including larger number of colleges and institutions with close industry interaction/ participation.
- 5.22.1.7. Provide export incentives for fabless chip design companies.

5.22.2. Promotion of Medical Electronic Devices Industry

- 5.22.2.1. Promote R&D through PPP model with the funding support from industry and Government with specific focus on critical components/ sub-assemblies.
- 5.22.2.2. Support systems for commercialization of technologies available with academic/ R&D institutions through exclusive/ non-exclusive mechanisms.

- 5.22.2.3. Create infrastructure for carrying out test, evaluation, accreditation and compliance by setting up new laboratories and upgrading the existing laboratories, including subsidized access of these facilities to MSMEs.
- 5.22.2.4. Encourage industry to comply with Indian Standards (IS).
- 5.22.2.5. Set up common testing facilities in the existing manufacturing hubs/ zones/ clusters.
- 5.22.2.6. Provide support for start-ups through common manufacturing facilities, open labs programme, etc.
- 5.22.2.7. Provide support for manufacturing of specific critical components/ sub-modules for medical electronics devices such as Magnets, RF amplifiers, scintillators, X-ray and computed tomography (CT) tubes, medical lasers, detectors, etc.
- 5.22.2.8. Provide support for skill development/ enhancement of the manpower required for the industry, including international harmonization efforts for practice of skills in medical electronics.
- 5.22.2.9. Institute a Phased Manufacturing Programme (PMP) for medical electronic devices.

5.22.3. Promotion of Automotive Electronics Industry and Power Electronics for Mobility

- 5.22.3.1. Provide support for R&D and concept-to-market innovation for next generation solid-state batteries and power electronics

for electric vehicles (EVs), intelligent transportation systems, drones, personal safety devices/ systems and automation.

5.22.3.2. Focus on IP creation in India at sub-system level by providing financial support to start-ups.

5.22.3.3. Set up a Centre of Excellence (CoE) in open engineered controls, electronics and software (CES) for EVs.

5.22.3.4. Promote exports through 'Make-in-India' branding programme, marketing incentives and country specific initiatives and export incentives.

5.22.3.5. Institute a Phased Manufacturing Programme (PMP) for automotive electronic products.

5.22.4. **Promotion of Strategic Electronics Industry**

5.22.4.1. Promote capacities for domestic sourcing of electronic goods/ systems in strategic and core infrastructure sectors, viz., defence, atomic energy, space, railways, power, telecommunications, etc.

5.22.4.2. Create long-term partnerships between domestic ESDM industries and the strategic sectors for domestic sourcing of electronic goods/ systems.

5.22.4.3. Set up individual core teams for being imparted training and subsequent transfer of technology (ToT) on core technologies [antenna design, signal processing card design, electromagnetic interference (EMI)/ electromagnetic compatibility (EMC) proofing, etc.], which are repetitively used to design solutions for the strategic electronics sector.

Promotion of Electronics Manufacturing Services (EMS) Industry

5.23. Promote the following key activities under EMS, for creation of the requisite component manufacturing eco-system in the country:

5.23.1. Engineering and design of PCBs.

5.23.2. PCB assembly, including sub-assemblies.

5.23.3. Functional testing.

5.23.4. Maintenance services such as warranty and repair services, etc.

5.23.5. Product and component design

Promotion of Assembly, Testing, Marking and Packaging (ATMP) Industry

5.24. Providing policy support for Assembly, Testing, Marking and Packaging (ATMP) lines for select semiconductor ICs, including memory chips, on security grounds.

Other Measures

5.25. Promote Eco-park in each State for processing of e-Waste in environment friendly manner in PPP mode to integrate formal and informal operators.

5.26. Facilitate warehousing of components and raw materials to reduce the lead time and make them available just-in-time for electronics manufacturing/ fabless chip design units, including start-ups.

5.27. Source, stockpile and promote exploration and mining or acquiring mines of rare earth metals in foreign countries/ continents (such as in Africa and Australia) required for electronics manufacturing.

5.28. MeitY shall formulate and implement appropriate schemes for promotion of electronics hardware manufacturing, as required from time to time.

5.29. Develop an index for indicating status and growth of electronics manufacturing industry in the States and bring out a periodic report indicating ranking of States.

5.30. Develop a mechanism for national-level market research reports on performance, impact assessment of policy interventions for their continuation and/ or mid-course correction, trends, emerging areas, etc., on a periodic basis, including models for successful innovation for all sub-sectors of electronics.

6. State Support

6.1 Encourage and support the States to play a proactive role in promotion of electronics manufacturing by providing conducive environment to promote investments.

7. Governance Structure

7.1 Create institutional mechanism for implementation of various schemes/ programmes under the Policy to review the implementation status and provide strategic recommendations/ decisions from time to time.

8. Power to Amend the Policy

8.1. Notwithstanding anything contained in the foregoing paras, MeitY with the approval of competent authority, may review and amend various aspects of this Policy from time to time, depending upon the experience gained during implementation, market dynamics, feedback from stakeholders, etc.


(Sanjay Kumar Rakesh)

Joint Secretary to Government of India
Telephone: 24363071


New Delhi, Dated: 25th February, 2019

To

The Manager
Government of India Press - along with Hindi version
Mayapuri, New Delhi.

Copy to:

1. All concerned Ministries / Departments of Government of India
2. Cabinet Secretariat
3. PMO
4. NITI Aayog
5. Comptroller and Auditor General of India
6. AS&FA, Ministry of Electronics and Information Technology
7. Internal Distribution


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