

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2330
TO BE ANSWERED ON 17.12.2021

POLICIES AND ALLOCATION OF FUNDS FOR ELECTRONICS SECTOR

2330. SHRI P. WILSON:

Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) details of initiatives/schemes/policies undertaken by the Ministry to allocate funding for Research and Development (R&D) for technology development of all States, especially for Tamil Nadu;
- (b) the existing policies, incentives, funds provided by the Ministry for the period 2016-2021 for the electronics sector across the country, especially the State of Tamil Nadu;
- (c) whether the Ministry has taken any steps to develop a healthy ecosystem to understand technology and to keep in pace with global industry in terms of electronics manufacturing for electronics and information technology development; and
- (d) if so, the details thereof, if not, the reasons therefor?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI RAJEEV CHANDRASEKHAR)

(a) and (b): Government of India's goal is to make India a significant design and manufacturing hub in the Global Value Chain for Electronics as part of its AtmaNirbhar Bharat Economic policies. As part of this, we are broadening and deepening our Electronics ecosystem to include design, innovation, Research and Development (R&D), Product / Intellectual Property (IP) development. The following may be noted in this regard:

- (i) National Policy on Electronics 2019 (NPE 2019) envisions positioning 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.
- (ii) National Policy on Software Products 2019 aims to develop India as the global software product hub driven by innovation, improved commercialisation, sustainable Intellectual property (IP), promoting technology start-ups and specialised skill sets, for development of the sector. The objective of the policy is to create a robust Indian Software Product development ecosystem.
- (iii) Under Digital India initiative of the Government, 'R&D in Information Technology (IT) / Electronics / Convergence, Communications & Broadband Technologies (CCBT)'

Scheme, focuses on creating a sustained R&D ecosystem at academia and R&D organizations across the country for the development of indigenous technology.

- (iv) Centre for Development of Advanced Computing (C-DAC) is an autonomous scientific society of Ministry of Electronics and Information Technology (MeitY). It is engaged in the design, development and deployment of electronics and advanced Information Technology (IT) products and solutions. Currently C-DAC has twelve centres spread across the country in the cities of Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mohali, Mumbai, Noida, Patna, Pune, Silchar and Thiruvananthapuram. In the State of Tamil Nadu, C-DAC Chennai Centre focuses on major R&D areas, viz., Free and Open-Source Software (FOSS); IoT and Ubiquitous Computing; 5G-SDN (Software Defined Network) and Cyber Security.
- (v) Society for Applied Microwave Electronics Engineering and Research (SAMEER) is an autonomous R&D institution under MeitY. SAMEER has five centres located at Mumbai, Chennai, Kolkata, Visakhapatnam and Guwahati. In the State of Tamil Nadu, SAMEER Chennai Centre is involved in R&D in the areas of RF and Microwave communication, Digital Signal Processing, antennas and electronics packaging.
- (vi) MeitY has initiated R&D project titled 'Next Generation Wireless Research and Standardization on 5G and Beyond' leading to 6G along the lines of Atmanirbhar Bharat. The project is being implemented by Centre of Excellence in Wireless Technology IIT Madras (CEWiT IITM) in collaboration with IIT Bombay, IIT Delhi, IIT Hyderabad, IIT Kanpur, IIT Kharagpur, IIT Madras and IISc Bangalore. CEWiT IITM and IIT Madras are located in Chennai, Tamil Nadu.
- (vii) National Centre of Excellence for Next Generation AMOLED Displays, OLED Lighting and OPV Products has been set up at IIT-Madras with a mandate to collaborate with stakeholders to develop next-generation, state-of-the-art, high-volume and cost-effective electronic components based on organic devices to address requirements through joint technology developments, to realize indigenous technologies for manufacturing.
- (viii) As per the Tamil Nadu Electronics Hardware Manufacturing Policy 2020, 50% subsidy is available on the expenses incurred for patent applications limited to a maximum of Rs.5 lakh per application to a maximum of Rs.50 lakh per company.

The year-wise expenditure incurred by MeitY on the Promotion of Electronics & IT Hardware Manufacturing and Research and Development (R&D) in Information Technology (IT) / Electronics / Convergence, Communications & Broadband Technologies (CCBT), is as under:

(Rupees in crore)					
Schemes / Programmes	2016-17	2017-18	2018-19	2019-20	2020-21
Promotion of Electronics & IT Hardware Manufacturing	49.87	460.37	727.35	655.08	478.62

R&D in IT / Electronics / CCBT	116	100.93	179	427.74	420.91
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(c) and (d): The steps taken by the Government to promote domestic manufacturing of electronic goods are at **Annexure**. These are expected to broaden and deepen the Electronics ecosystem and promote the R&D in the country to keep in pace with global industry.

Steps taken by the Government to promote domestic manufacturing of electronic goods

- 1. National Policy on Electronics 2019:** The National Policy on Electronics 2019 (NPE 2019) has been notified by Ministry of Electronics and Information Technology (MeitY). The vision of NPE 2019 is 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.

To attract and incentivize large investments in the electronics value chain and promote exports, following Schemes have been notified:

- (i) Production Linked Incentive Scheme (PLI) for Large Scale Electronics Manufacturing** notified vide Gazette Notification No.CG-DL-E-01042020-218990 dated April 01, 2020 provides an incentive of 4% to 6% to eligible companies on incremental sales (over base year) involved in mobile phone manufacturing and manufacturing of specified electronic components, including Assembly, Testing, Marking and Packaging (ATMP) units.
 - (ii) Production Linked Incentive Scheme (PLI) for IT Hardware** notified vide Gazette Notification No.CG-DL-E-03032021-225613 dated March 03, 2021 provides an incentive of 4% to 2% / 1% on net incremental sales (over base year) of goods manufactured in India and covered under the target segment, to eligible companies, for a period of four (4) years. The Target Segment under PLI Scheme includes (i) Laptops (ii) Tablets (iii) All-in-One PCs and (iv) Servers
 - (iii) Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS)** notified vide Gazette Notification No.CG-DL-E-01042020-218992 dated April 01, 2020 provides financial incentive of 25% on capital expenditure for the identified list of electronic goods that comprise downstream value chain of electronic products, i.e., electronic components, semiconductor / display fabrication units, ATMP units, specialized sub-assemblies and capital goods for manufacture of aforesaid goods.
 - (iv) Modified Electronics Manufacturing Clusters (EMC 2.0) Scheme** notified vide Gazette Notification No.CG-DL-E-01042020-218991 dated April 01, 2020 provides support for creation of world class infrastructure along with common facilities and amenities, including Ready Built Factory (RBF) sheds / Plug and Play facilities for attracting major global electronics manufacturers along with their supply chain to set up units in the country. The Scheme provides financial assistance for setting up of both EMC projects and Common Facility Centres (CFCs) across the country.
- 2. 100% FDI:** As per extant Foreign Direct Investment (FDI) policy, FDI up-to 100% under the automatic route is permitted for electronics manufacturing (except from countries sharing land border with India), subject to applicable laws / regulations; security and other conditions.
 - 3. Modified Special Incentive Package Scheme (M-SIPS):** The Scheme was notified on 27th July, 2012 to provide financial incentives to offset disability and attract investments in the

electronics manufacturing sector. It was amended in August, 2015 to extend the period of the scheme, enhance scope of the Scheme by including 15 more product verticals, and attract more investment. The scheme was further amended in January, 2017 to expedite the investments. The scheme provides subsidy for capital expenditure - 20% for investments in Special Economic Zones (SEZs) and 25% in non-SEZs. The incentives are available for 44 categories / verticals of electronic products and components covering entire electronics manufacturing value chain. The Scheme was open to receive applications till 31.12.2018 and is in the implementation mode. Under the Scheme, 308 applications with proposed investment of Rs 83,598 crore have been approved. Further, incentives amounting to Rs 1372.33 crore have been disbursed under this Scheme.

4. **Electronics Manufacturing Clusters (EMC) Scheme:** Electronics Manufacturing Clusters Scheme was notified on 22nd October, 2012 to provide support for creation of world-class infrastructure along with common facilities and amenities for attracting investment. Under the Scheme, 19 Greenfield EMCs and 3 Common Facility Centres (CFCs) measuring an area of 3,464 acres with total project cost of INR 3,762 crore including Government Grant-in-Aid of INR 1,538 crore have been approved.
5. **Electronics Development Fund (EDF):** Electronics Development Fund (EDF) has been set up as a “Fund of Funds” to participate in professionally managed “Daughter Funds” which in turn will provide risk capital to startups and companies developing new technologies in the area of electronics and Information Technology (IT). This fund is expected to foster R&D and innovation in these technology sectors. INR 409 crore has been committed through EDF to 9 Daughter Funds with a targeted corpus of INR 2,626 crore.
6. **Phased Manufacturing Programme (PMP)** has been notified to promote domestic value addition in mobile phones and their sub-assemblies / parts manufacturing. As a result, India has rapidly started attracting investments into this sector and significant manufacturing capacities have been set up in the country. The manufacturing of mobile phones has been steadily moving from Semi Knocked Down (SKD) to Completely Knocked Down (CKD) level, thereby progressively increasing the domestic value addition.
7. **Tariff Structure** has been rationalized to promote domestic manufacturing of electronic goods, including, *inter-alia*, Cellular mobile phones, Televisions, Electronic components, Set Top Boxes for TV, LED products and Medical electronics equipment.
8. **Exemption from Basic Customs Duty on capital goods:** Notified capital goods for manufacture of specified electronic goods are permitted for import at “NIL” Basic Customs Duty.
9. **Simplified import of used plant and machinery:** The import of used plant and machinery having a residual life of at least 5 years for use by the electronics manufacturing industry has been simplified through the amendment of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, vide Ministry of Environment, Forest and Climate Change Notification dated 11.06.2018.
10. **Relaxing the ageing restriction:** The Department of Revenue vide Notification No.60/2018-Customs dated 11.09.2018 has amended the Notification No.158/95-Customs dated 14.11.1995, relaxing the ageing restriction from 3 years to 7 years for specified electronic goods manufactured in India and re-imported into India for repairs or reconditioning.
11. **Public Procurement (Preference to Make in India) Order 2017:** To encourage ‘Make in India’ and to promote manufacturing and production of goods and services in India with a view to enhancing income and employment, the Government has issued Public Procurement

(Preference to Make in India) Order 2017 vide the Department for Promotion of Industry and Internal Trade (DPIIT) Order dated 15.06.2017 and subsequent revisions vide Orders dated 28.05.2018, 29.05.2019, 04.06.2020 and 16.09.2020. In furtherance of the aforesaid Order, MeitY has notified mechanism for calculating local content for 13 Electronic Products viz., (i) Desktop PCs, (ii) Thin Clients, (iii) Computer Monitors, (iv) Laptop PCs, (v) Tablet PCs, (vi) Dot Matrix Printers, (vii) Contact and Contactless Smart Cards, (viii) LED Products, (ix) Biometric Access Control / Authentication Devices, (x) Biometric Finger Print Sensors, (xi) Biometric Iris Sensors, (xii) Servers, and (xiii) Cellular Mobile Phones, for procurement to be made from local suppliers.

12. Compulsory Registration Order (CRO): MeitY has notified “Electronics and Information Technology Goods (Requirement of Compulsory Registration) Order, 2012” for mandatory compliance to ensure safety of Indian citizens by curbing import of substandard and unsafe electronic goods into India. 63 Product Categories have been notified under the CRO and the order is applicable on 63 product categories.

13. Establishment of Gallium Nitride (GaN) Ecosystem Enabling Centre and Incubator: The project for “Establishment of Gallium Nitride (GaN) Ecosystem Enabling Centre and Incubator for High Power and High Frequency Electronics” has been approved. The project will be implemented by Society for Innovation and Development (SID), being converted to a Section 8 company titled “Foundation for Science, Innovation and Development” under the auspices of Indian Institute of Science (IISc) at Centre for Nano Science and Engineering (CeNSE), Bengaluru.

14. National Centre of Excellence in Large Area Flexible Electronics (NCFLEX) has been set up in IIT-Kanpur with the objectives to promote R&D; Manufacturing; Ecosystem; Entrepreneurship; International Partnerships and Human Resources and develop prototypes in collaboration with industry for commercialization.

15. National Centre of Excellence for Technology on Internal Security (NCETIS) has been set up at IIT-Bombay with the objective to address the internal security needs of the nation on continuous basis by delivering technology prototypes required for internal security and to promote domestic industry in internal security.

16. National Centre of Excellence for Next Generation AMOLED Displays, OLED Lighting and OPV Products has been set up at IIT-Madras with a mandate to collaborate with stakeholders to develop next-generation, state-of-the-art, high-volume and cost-effective electronic components based on organic devices to address requirements through joint technology developments, to realize indigenous technologies for manufacturing.

17. Centre on Excellence (CoE) on Medical Electronics and Bio-Physics has been approved to be set up at Andhra Pradesh MedTech Zone (AMTZ), Visakhapatnam with a mandate of carrying out various R&D activities, strengthening innovations, IP creation, prototype modelling for Medical device manufacturers, including Electro-Biomaterial technology product manufacturers, etc.
