

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO.3679
TO BE ANSWERED ON 02.01.2019

SELF-SUFFICIENCY IN DOMESTIC ELECTRONIC PRODUCTION

**3679. SHRI SHIVKUMAR UDASI:
SHRI ADHIR RANJAN CHOWDHURY:**

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

- (a) whether domestic production is insufficient to meet increasing demand in electronic sector and if so, the reasons therefor;
- (b) whether the Government has finalised the National Policy on Electronics to boost electronics manufacturing in India and if so, the details thereof; and
- (c) the action taken by the Government to promote manufacturing and not superficial assembly of components in the electronics sector?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI S.S.AHLUWALIA)

(a): While the domestic production is not sufficient to meet increasing demand in electronics sector in the country, it is increasingly being met from domestic production. As a result of various measures taken by the Government over the last few years to address the challenges faced by the electronics sector, manufacturing of electronic products has shown a robust growth in the country. The domestic electronics hardware production has increased from INR 1,90,366 crore in 2014-15 to INR 3,87,525 crore in 2017-18, registering a Compound Annual Growth Rate (CAGR) of 26.7%.

(b): Ministry of Electronics and Information Technology (MeitY) has formulated the draft National Policy on Electronics 2018 (NPE 2018) after extensive stakeholder consultation. The draft NPE 2018 was put up for public consultation on 10.10.2018 and views/ comments were invited till 15.11.2018. The draft of NPE 2018 has accordingly been revised by suitably incorporating the comments/ inputs received through the process of public consultation. Salient features of the draft NPE 2018 are given in **Annexure-1**.

(c): As a result of implementation of the Phased Manufacturing Programme (PMP) for cellular mobile handsets and their sub-assemblies, parts and components, wherein 14 sub-assemblies of cellular mobile handsets are being indigenized in a phased manner, domestic manufacturing is steadily moving from Semi Knocked Down (SKD) to Completely Knocked Down (SKD) level, thereby progressively increasing the domestic value addition. Several steps have been taken by

the Government for promotion of electronics manufacturing in the country. These are listed at **Annexure-2**.

Annexure-1

Salient features of the draft National Policy on Electronics 2018 (NPE 2018)

The Ministry of Electronics and Information Technology (MeitY) has formulated the National Policy on Electronics 2018 (NPE 2018), which 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.

The salient features of the policy include:

1. **Creating eco-system for globally competitive ESDM sector:** Promoting domestic manufacturing and export in the entire value-chain of ESDM for economic development to achieve a turnover of USD 400 billion by 2025. This will include targeted production of 1.0 billion mobile handsets by 2025, valued at USD 190 billion (approx. INR 13 lakh crore), including 600 million mobile handsets valued at USD 110 billion (approx. INR 7 lakh crore) for export.
2. **Promotion of Electronic Components Manufacturing Ecosystem:** 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.
3. **Mega Projects:** 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.
4. Formulate suitable schemes and incentive mechanisms to encourage new units and expansion of existing units in electronics manufacturing sector.
5. Focus on Phased Manufacturing Programmes (PMP) for various electronic goods, on the lines of PMP for Mobile Phones and sub-assemblies thereof.
6. **Focus on encouraging Industry-led R&D and Innovation in all sub-sectors of electronics:** 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 electronics, automotive electronics, cyber security, strategic electronics, 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, including setting up framework for creation of an ecosystem for promoting design and IP in the country.

7. Promote and create a framework for comprehensive start-up eco-system in aforementioned emerging technology areas.
8. Improve ease-of-doing Business for the ESDM Industry.
9. Provide incentives and support for significantly enhancing availability of skilled manpower in the ESDM sector.
10. 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.
11. Develop manufacturing capacities for high performance computing.
12. Provide support for Micro, Small and Medium Enterprises (MSME) in ESDM sector.

13. Special thrust on:

- Fabless Chip Design Industry
- Medical Electronic Devices Industry
- Automotive Electronics Industry and Power Electronics for Mobility
- Strategic Electronics Industry

14. Emulation/ rapid prototyping infrastructure at certain locations that are accessible to all fabless start-ups in the country.

15. Emphasis on Cyber Security:

- a. Enhance understanding of cyber security issues/ concerns, risks and mitigation measures thereof pertaining to electronic products.
 - b. Encourage development of adequate capacities for testing.
 - c. Encourage use of IT products tested and evaluated for security, based on standards like Common Criteria/ ISO 15408.
 - d. Promote the use of secure chips to reduce cyber security risks.
 - e. Promote start-up eco-system for development of photonics, nano-based devices and cyber security products.
16. Promote trusted electronics value chain initiatives to improve India's 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.).
17. Exploring the possibility of leveraging Defence Offsets, in consultation with the Department of Defence Production (DDP), for development of electronic components manufacturing.
18. Create Sovereign Patent Fund (SPF) to promote the development and acquisition of IPs in ESDM sector.

Annexure-2

Steps taken by the Government for promotion of electronics manufacturing in the country:

Modified Special Incentive Package Scheme (MSIPS) provides financial incentives to offset disability and attract investments in the Electronics Systems Design and Manufacturing (ESDM) sector, including

electronic components. The scheme is available for both new projects and expansion projects, and is open to receive applications till 31.12.2018.

- (i) The Electronics Manufacturing Clusters (EMC) Scheme was notified to provide financial support for creation of state-of-art infrastructure for electronics manufacturing units. The scheme was open for receipt of application for a period of 5 years, i.e., upto 21st October, 2017. Further period of 5 years is available for disbursement of funds for the approved applicants. Under the scheme, 20 Greenfield EMCs and 3 Common Facility Centres (CFCs) covering a land area of 3,565 acres have been accorded final approval for development of infrastructure and common facilities at a cost of Rs.3,898 crore, including Government Grant-in-aid of Rs.1,577 crore. An area of 3,565 acres across 15 states is being developed in these EMCs for setting up of Electronics industry across the country.
- (ii) Tariff Structure has been rationalized to promote domestic manufacturing of electronic goods, including *inter-alia* Mobile Handsets, Televisions, Electronic Components, Set Top Boxes, LED Products, Medical Electronics, Solar PV Cells and Microwave Ovens. To promote domestic value addition in mobile handsets and their parts/ components manufacturing, a Phased Manufacturing Programme (PMP) has been notified. As a result, India has rapidly started attracting investments into this sector and significant manufacturing capacities have been set up in the country during the past three years. The manufacturing of mobile handsets and their parts/ components has been steadily moving from Semi Knocked Down (SKD) to Completely Knocked Down (SKD) level, thereby progressively increasing the domestic value addition.
- (iii) As per extant Foreign Direct Investment (FDI) policy, FDI upto 100% under the automatic route is permitted for electronic product manufacturing, subject to applicable laws/ regulations; security and other conditionalities.

- (iv) For promotion of exports in the sector, Merchandise Exports from India Scheme (MEIS) and Export Promotion Capital Goods (EPCG) Scheme are available under the Foreign Trade Policy, 2015-20. MEIS offers export incentives so as to offset disabilities of manufacturing. Zero duty EPCG scheme allows import of capital goods at zero customs duty, subject to specified export obligation.
- (v) 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.
- (vi) Notified capital goods for manufacture of specified electronic goods are permitted for import at “Nil” Basic Customs Duty.
- (vii) 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.

Promotion of Innovation and R&D

- (viii) 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 companies developing new technologies in the area of electronics, nano-electronics and Information Technology (IT). This fund is expected to foster R&D and innovation in these technology sectors. EDF will be investing in 13 Daughter Funds over a period of 4-5 years. The total targeted corpus of these 13 Daughter Funds is Rs.6,950 crore and the amount committed by EDF to these 13 Daughter Funds is Rs.857 crore. As at the end of second quarter of FY 2018-19, EDF has invested Rs.53.52 crore in six

Daughter Funds, which in turn have made investments of Rs.177.37 crore in 47 Ventures/ Startups. Total Employment in supported Startups was around 4,200.

- (ix) Keeping in view the huge domestic requirement on account of roadmap for digitalization of the broadcasting sector, Indian Conditional Access System (iCAS) has been developed in Public-Private Partnership (PPP) mode to promote indigenous manufacturing of Set Top Boxes (STBs). The iCAS is available to domestic STB manufacturers at a price of USD 0.5 per license for a period of three years, as against market price of USD 3-5 per license for other competing products. The implementation of iCAS in the cable networks is underway.
- (x) Ministry of Electronics and Information Technology (MeitY) provides grant-in-aid support to institutes of higher learning like IITs, IISc, Central Universities and R&D Organizations to conduct research in identified thrust areas. These research programmes are aimed to deliver proof of concept, technology/ product development and transfer of technology. During the last few years, several research initiatives have been taken in these areas. These research programmes also result in generation of specialized manpower to support “Make in India”.
- (xi) An Electropreneur park has been set up in New Delhi for providing incubation for development of Electronic System Design & Manufacturing (ESDM) sector which will contribute IP creation and Product Development in the sector.
- (xii) 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.
- (xiii) 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.
- (xiv) Centre for Excellence on Internet of Things (IoT) has been set up in Bengaluru jointly with NASSCOM.
- (xv) An Incubation centre with focus on medical electronics has been set up at IIT-Patna.
