

Government of India  
(Bharat Sarkar)  
Ministry of Defence  
(Raksha Mantralaya)  
Department of Defence Production  
(Raksha Utpadan Vibhag)

NOTIFICATION

New Delhi, the 8<sup>th</sup> Mar 2019

No.1(18)/02/Indigenization/DP(PIg-ES)/818 POLICY FOR INDIGENIZATION OF COMPONENTS AND SPARES USED IN DEFENCE PLATFORMS FOR DPSUs/OFB, as approved by the Competent Authority on 6<sup>th</sup> Mar 2019 is hereby notified as enclosed.

  
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POLICY FOR INDIGENIZATION OF COMPONENTS AND SPARES USED IN DEFENCE PLATFORMS FOR DPSUs/OFB

1. Background

1.1 A large number of defence equipment/platforms are being manufactured in India on the basis of Transfer of Technology (ToT). Most of these platforms when manufactured in India, require parts and components (including alloys & special materials) from foreign OEMs. Similarly, several platforms which are designed and developed in India are also based on imported parts/components. As a result, even though the equipment/platform is being manufactured in India, the dependence on foreign OEMs subsists and thereby compromises the goal of self-reliance in defence.

1.2 According to one estimate, the value of components (including alloys & special materials) imported by Defence PSUs and Ordnance Factories during 2017-18 is approximately Rs 13,810.61 crores. The domestic sourcing of components and sub-assemblies by Defence PSUs and Ordnance Factories during 2017-18 was Rs 44,949 crores. This does not include the import of components used by domestic industry/MSMEs for various sub-assemblies which are supplied to the Defence PSUs and Ordnance Factories. Assuming nearly 50% value addition by the suppliers, the import of components would be additional Rs 22,475 crores during 2017-18.

1.3 The import of parts and components also put a constraint on the ability of Indian organizations to export of these equipment/platform manufactured in India thereby putting limitation on growth of country's defence industrial ecosystem.

1.4 One of the challenges in indigenization is the huge diversity in the number of components (including alloys & special materials) required. According to one estimate, nearly one lakh components used for various defence and aerospace related platforms are being imported by Defence PSUs and Ordnance Factories. Besides, there are components which are being imported by private industry/MSMEs for the platforms and sub-assemblies being manufactured by them. Further, the volume required for several components is small, not amenable to economically viable unit for manufacturing.

1.5 There are three major technology areas which require advancement in terms of country's ability to indigenize the components (including alloys & special materials) and spares. These are materials technology, engine technology and electronics chip technology. Materials required for defence are typically lighter, stronger, and blast resistant. New composite materials and new super alloys have been discovered with superior performance qualities. Associated with these materials are demands of forgings, castings, and precision machining to achieve desired shapes and sizes. Another important technology area relates to Engines, used in ground vehicles like tanks and other heavy vehicles, or naval vessels or aircrafts of different types. The engines also vary with fuel used. While different applications require different type of engines, one common differentiator is that all these engines used are more powerful, lighter and provide greater thrust. The third technology area is electronics chip technology. There is increasing dependence of electronics and software in defence platform thereby increasing the share of electronic chips, sensors with embedded and application software customized for platform requirements.

1.6 The proposed policy tries to address the challenges posed in indigenization.

## 2. Objectives

The objective of the policy is to create an industry ecosystem which is able to indigenize the imported components (including alloys & special materials) and sub-assemblies for defence equipment and platform manufactured in India and to leverage the said capability to create components export market. It is estimated that Defence PSUs will reduce the import bill more than Rs 15000 Cr by 2022 through indigenization of products and processes. The timelines for various initiatives will be drawn up through executive orders to be issued by appropriate agencies/ authorities.

## 3. Strategies

3.1 All Defence PSUs and Ordnance Factories shall give preference to indigenous component (including alloys & special materials) or sub-assembly over imported without compromise on quality and certification requirements.

3.2 Indigenization should, as far as possible, result in significant savings in cost. Indigenized product should invariably be cheaper and meet all technical and functional specifications of the imported component which it seeks to replace. Initial development cost by indigenous manufacturers will however be borne in mind while comparing cost of newly indigenized item with its imported cost.

3.3 The goal of indigenization shall be Indian designed and manufactured product. However, recognizing that some value-addition is better than no value-addition (import), a graded approach to value-addition of indigenized components and sub-assemblies may be adopted based on state of domestic industry capability and taking into account technological constraints esp. for engine technology, electronic chip fabrication, material technology etc. The value-addition may be increased in a phased manner.

3.4 Ensuring legal compliance

- Legal agreements entered into shall be adhered into while taking up indigenization. Wherever there is legal restriction for indigenizing, efforts would be made, through bilateral negotiations to get such restrictions removed.
- All future Transfer of Technology agreements to safeguard India's rights to indigenize components.

3.5 IP Policy for Indigenized components (including alloys & special materials)

- DDP to finalize an IP Policy with respect to the IP Rights of components (including alloys & special materials) and sub-assemblies indigenized.

3.6 Development of Indigenization Portal- DDP shall develop a common Indigenization Portal for all Defence PSUs and Ordnance Factories, with provision to include SHQs, which will, interalia, offer the following services:

- List of items to be indigenized. This list would be continuously updated based on new components (including alloys & special materials) which get added due to induction of new equipment/platforms and deletion of items which get successfully indigenized.

- Details of items proposed to be indigenized.
- Searching items based on various parameters like estimated costs of item, manufacturing capabilities required.
- Enabling Defence PSUs and Ordnance Factories to search if similar component has been indigenized earlier and if so, details organizations who have indigenized.
- Enabling online application for registration of vendors expressing interest for indigenizing a product.
- Providing details of Facilitation Centers related to every class/category of spares and locations where samples may be accessed for examination.
- Identifying & listing Test Centers so that developers can test the suitability of the products manufactured.

3.7 80:20 rule for taking up items on high priority for indigenization

- Each Defence PSU/Ordnance Factory to identify 10 to 20 items which constitute highest value of import and take up a campaign for indigenization those. This exercise should be repeated as one or more items in the list gets indigenized. Besides, it is prudent to accord priority to the essential spares that are vital for the life sustenance of the platform.

3.8 Government schemes to support development of technological capabilities

- DDP shall provide support for development of following key technologies
  - Engine technology-Aero, Naval, Heavy land vehicles.
  - Semiconductor fab technology for fabrication of electronic chips.
  - Material technology for development of special materials and super alloys.
- DDP will also examine feasibility of acquiring offshore assets for obtaining these technologies and materials.
- Wherever IGA have been signed, it may be explored to leverage same for JVs for ToTs.

3.9 Items required in small numbers not allowing economically viable scale of manufacturing facilities

- Set up Defence Innovation Hubs with participation from industry and support from iDEX. These Defence Innovation Hubs would include, inter alia
  - A Design Centres for prototype development and providing design of components
  - A Common Facility Centres required for manufacturing these components (including alloys & special materials) based on designs of prototype developed.
- Industry to use the above Common Facilities to produce the items on cost plus basis.

3.10 Preference to domestic manufacturers in supply of components (including alloys & special materials)/sub-assemblies produced domestically in terms of Public Procurement Order

- Over 100 items have been notified under Public Procurement Order. Additional items be taken up for notification.
- Industry may also propose items which are being domestically produced but are being imported.
- Regular audits be conducted to ensure that the procurement of the notified components has fulfilled requirements of Public Procurement Order.

3.11 Testing of items being indigenized

- To encourage indigenization, any product which is developed by industry as an indigenized product, in lieu of imported product, shall be taken up for testing irrespective of whether there is demand of that item at that point of time. This testing will be carried out by the Defence PSU/Ordnance Factory at No Cost No Commitment basis. In other words, the industry/MSME developing the item shall bear the costs involved in testing. Besides, the Defence PSU or the Ordnance Factory concerned shall not be obliged to procure the item from the vendor.

- Definite time schedule for completion of testing procedures will be drawn up by concerned QA/ Testing agency.
- The testing or evaluation of non-critical products/stores indigenized by DPSUs and OFB to be outsourced to Third Party Inspection (TPI) agencies.

### 3.12 Third Party Testing

- DGQA and HAL will expedite implementation of Third Party Testing mechanism to meet large scale requirements of indigenization.
- Non-critical store testing/ evaluation to be outsourced to TPI agencies.

### 3.13 Testing Infrastructure for Industry

- To enable greater ease of testing, DDP may provide support for setting up dedicated Defence Testing Infrastructure. The approval of draft Defence Testing Infrastructure scheme in this regard shall be expedited.

### 3.14 Long term Orders

- Where ever the Defence PSUs and Ordnance Factories have visibility of long term demand of a component, they shall, issue long term tenders for development of indigenous replacements of imported components (including alloys & special materials).

### 3.15 iDEX Challenges for Prototype Development

- Defence PSUs and Ordnance Factories shall take up iDEX Challenges for prototype development of components (including alloys & special materials) which are not normally amenable to design and production by industry. iDEX Scheme was launched by Hon'ble PM on 12<sup>th</sup> April 2018. 11 Challenges have been announced in Aug 2018. More challenges to be notified in future.
- For innovative solutions, assistance of DGQA will be provided, if feasible.

### 3.16 Adoption of Make-II process in Defence PSUs and Ordnance Factories

- Defence PSUs and Ordnance Factories shall adopt Make-II, mutatis-mutandis for their own requirement. While such adoption would be for any

procurement being done by them, this would be especially relevant for indigenization.

### 3.17 Indigenization Fund in Defence PSUs

- Defence PSUs shall set up an Indigenization Fund for providing support for future indigenization. This Fund would be created out of cost savings from indigenization of components (including alloys & special materials) etc. 50% of cost savings through Indigenization shall be channelized to begin with. This amount may be rationalized later based on progress. The amounts in this Indigenization Fund would be used to support a duly approved scheme for providing development support for indigenization of imported items.
- Ordnance Factory Board would be encouraged to set up scheme for providing development support for indigenizing items imported by them. Necessary approval of Competent Authority shall be taken.
- As an alternative, minimum 2% of PAT for devolution into Indigenization Fund may be adopted.

### 3.18 Priority in Testing and Certification

- Items which involve indigenization to be given high priority for testing and certification by public sector testing and certification institutions.
- Testing will be done in a definite timeframe.
- In case of multiple Certifying Agencies, OFB/DPSU may prioritize same in consultation with QA agencies.

### 3.19 Tax Rationalization:

- DDP to take up with Department of Revenue wherever there is inverted tax structure creating barrier to indigenization.

### 3.20 Encouraging export

- Indigenized components (including alloys & special materials) should open a big export market for components and sub-assemblies, especially in countries which are using the platforms to which these components relate. Industry



partners who have indigenized these components would be facilitated for exporting these components to such countries.

3.21 Clauses for Guarantee/ Warrantee of Indigenized items may be included appropriately.

Similarly, Clauses for accountability of the manufacturer for the Indigenized item may also be included appropriately.

3.22 Defence PSUs/ OFs may also adopt the DRDO Technology Development Fund (TDF) route for Indigenization components (including alloys & special materials) / sub-assemblies as the TDF scheme also envisages the Indigenization of components/ sub-assemblies to reduce the Import.

3.23 A permanent Monitoring Committee be proposed to oversee efforts made by Defence PSUs/ OFB to ensure progress of Indigenization.

3.24 Chief Indigenization Officers in Defence PSUs and Ordnance Factories to be Nodal Officers for implementing these policy initiatives.

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