I. Preamble

- 1.1. The Information Technology and Information Technology Enabled Services (IT-ITES) industry of the country is a critical pillar in India's economic growth. The industry has potential to be a driving force for enabling India to develop capabilities for harnessing new technologies cutting across all the sectors, namely, agriculture, health, education, manufacturing etc, thereby creating significant employment and entrepreneurial opportunities. According to NASSCOM the sector at present is generating an estimated revenue of around USD 168 billion, including export of USD 126 billion on an annual basis, which is around 8% contribution to India's GDP. The industry is also one of the largest organised sector employers, generating nearly 14 million direct and indirect jobs. It is further estimated that the industry can contribute up to 350 billion USD accounting to ~10 percent of India's GDP by 2025.
- 1.2. The Digital India Programme, launched by the Government in 2015, has ensured that the Indian IT industry delivers world class services at competitive quality and costs. The programme is leading to a transformation of India into a knowledge-based economy and digitally empowered society based on technology that is inclusive, affordable and sustainable. This has ensured digital access, digital infrastructure, digital empowerment and bridging of digital divide with the common thread of digital inclusion. As a result, India's Digital footprint is one of the fastest growing in the world with

the potential to become a Trillion Dollar Digital Economy by 2025. India's movement of digital transformation is finding global resonance.

- 1.3. The India's IT industry is predominantly a service led industry. There is tremendous scope for Indian Software Products to build upon the strength of Indian IT industry, and the innovative & technological capabilities in the country. As per NASSCOM Strategic Review 2017, the Global Software Product Industry is estimated to be USD 413 billion. However, the contribution of Software Products in Indian IT-ITES revenue is just USD 7.1 billion out of which 2.3 billion USD are exports. On the other hand import of Software Products is estimated to be nearly 10 billion USD, so as such India is a net importer of software products at present. Therefore, it is prudent to develop a conducive Software product ecosystem to transform a predominantly service oriented Indian IT/ITeS industry into a technology oriented products industry.
- 1.4. The Software product ecosystem is characterised by innovations, Intellectual Property(IP) creation and large value addition increase in productivity, which has the potential to significantly boost revenues and exports in the sector, create substantive employment and entrepreneurial opportunities in emerging technologies and leverage opportunities available under the Digital India Programme, thus, leading to a boost in inclusive and sustainable growth.
- 1.5. The development of the software product industry will result in positive externalities for the entire spectrum of the Indian IT/ITeS sector, and hence for the overall economy, by facilitating development of platforms that ensure

that technology-based solutions are generated for sector-specific areas, that will tap the untapped growth potential of the sector concerned. Further, leveraging new and emerging technologies like Artificial Intelligence, Internet of Things, Block Chain etc. to the maximum advantage across sectors of the economy requires higher levels of innovation, keeping pace with the advancement of technology globally. The value addition that will so occur will boost the growth rate of each of the sectors by realisation of the immense potential therein, that is largely yet to be exploited to the fullest.

1.6. To realise the potential of the software product industry in India in an optimal manner, there is a need for a framework where industry, academia and government work in synergy to bring about a paradigm shift in the IT/ITES sector of the country. The "National Policy on Software Product" (NPSP) is the first significant step towards achieving this goal. The policy 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, based on ICT.

II. Terms & Definitions

For the purpose of this policy and its implementation following terms and definitions will be considered:

a. Indian Company: As per sub-section 26 of section 2 of the Income Tax Act, 1961, "Indian company" means a company formed and registered under the Companies Act, 1956 or Companies Act, 2013, provided that the registered office or, as the case may be, principal office of the company, corporation, institution, association or body in all cases is in India.

- b. Indian Software Product Companies (ISPC): An ISPC is defined as an Indian company in which 51% or more share holding is with Indian citizen or person of Indian origin and is engaged in the development, commercialisation, licensing and sale /service of Software products and has IP rights over the Software product(s).
- c. **Software Product:** Software product is a programme used or produced by a computer or network which can be stored or transmitted through an electronic medium and offers some form of utility. In addition, such a product can be protected in India through permissible Intellectual Property Right laws and can be commercialized for use through licensing.
- d. MSME: The definition of MSME will be as per Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 or amended from time to time by administrative department.
- e. Startup: The definition of startup will be as per Gazette Notification No.
 G.S.R. 364(E) dated April 11, 2018 notified by Department of Industrial Policy and Promotion (DIPP) or amended from time to time by administrative department.

III. Vision

To develop India as a Software Product Nation and a global leader in conception, design, development and production of intellectual capital driven Software Products, thus, accelerating growth of entire spectrum of IT Industry of the country.

IV. Missions

- (i) To promote the creation of a sustainable Indian software product industry, driven by intellectual property (IP), leading to a ten-fold increase in share of the Global Software product market by 2025.
- (ii) To nurture 10,000 technology startups in software product industry, including 1000 such technology startups in Tier-II and Tier-III towns & cities and generating direct and in-direct employment for 3.5 million people by 2025.
- (iii) To create a talent pool for software product industry through (i) up-skilling of 1,000,000 IT professionals, (ii) motivating 100,000 school and college students and (iii) specialise 10,000 professionals that can provide leadership.
- (iv)To build a cluster-based innovation driven ecosystem by developing 20 sectoral and strategically located software product development clusters having integrated ICT infrastructure, marketing, incubation, R&D/test beds and mentoring support.
- (v) In order to evolve and monitor schemes & programmes for the implementation of this policy, National Software Products Mission will be set up with participation from Government, Academia and Industry.

V. Strategies

1. Promoting Software Products Business Ecosystem

 An Indian Software product registry will be created through industry ownership. This will act as a common pool of Indian Software Products thereby providing a trusted trade environment.

- ii. A conducive environment will be created in order to facilitate active participation of software companies in Capital Market.
- iii. A Single Window platform will be established for facilitation of Indian software product industry in fast-tracking legal and regulatory issues regarding (i) import and export and (ii) opening and closure of software product enterprises.
- iv. A classification system for Indian software products will be evolved through a model HS code. The model HS code will be further sub categorized based on the type of software products, its inter-linkages with other economic sectors, including services and hardware manufacturing. Such model classification will facilitate tracking and easing of export of such products. This will also help in evolving statistical data for further promotion of specific sectoral software products.
- v. The Indian Software Product Companies will be allowed to set off tax payable, if any, on the investments made (on an accrued basis) in R&D of indigenous software products.

2. Promoting Entrepreneurship & Innovation for Employment

In order to create a conducive ecosystem, a programme of incubation will be initiated to nurture at least 10,000 software product startups, thereby generating direct and indirect employment for 1 million persons.
 1000 of these startups shall be targeted to be set up in Tier-II and Tier-III town & cities. The programme will provide (i) Technical & Infrastructure

assistance, (ii) Mentoring Support, (iii) Seed Fund, (iv) R&D & Testing facilities (v) Marketing and Branding support.

- ii. A dedicated Software Product Development Fund (SPDF) with a corpus of Rs. 1000 Crore will be created in the form of Fund of Funds. SPDF will participate in venture fund to provide risk capital so as to promote scaling up of market ready Software Products. The fund will fill the gap between the capital requirements of technology and knowledge based software product startup enterprises and funding available from traditional institutional lenders such as banks. This scheme will create a corpus of Rs. 5000 Crore with an end target to have at latest 100 Indian software product companies having valuation of Rs. 500 Crore or employing 200 persons. The SPDF will be financially managed by a professional Financial Institution/ Asset Management Company as per SEBI guidelines. Spin off effect of such activity would create other support services and further employment.
- iii. A Programme to support Research and Innovation on Software Products in Institutes of Higher Learning and Research will be initiated with a budgetary outlay of Rs. 500 Crore with participation from Government, Academia and Industry. The objective of the programme is to bridge the existing gaps in the Industry-Academia research and facilitate development of novel, high quality affordable software products through research and innovation. Financial support in form of a Grant-in-aid will be provided to Indian MSMEs and start-ups for undertaking such collaborative research with academic/ research institutes leading to IP

development. To ensure that such research outcomes are absorbed in participating MSMEs businesses a matching fund from such applicants will be a pre-requisite for government grant. An expert organisation having established capabilities to professionally manage innovation and research leading to commercial translation will be identified to operationalise the fund.

- iv. A programme for organising 20 dedicated challenge grants will also be initiated with an aim to solve societal challenges, such as in Education, Healthcare, Sanitation, Agriculture, persons with special needs (Divyangjan) etc in collaboration with line Ministries, state governments and Industry Bodies/ Think Tanks. The Research fund will also support such challenge grants/ hackathons for identifying software product solutions for societal challenges.
- v. A Programme to create 20 domain specific Indian software product clusters around existing industry concentrations, such as in automobile, textile, financial services, electronic manufacturing, energy etc will be initiated. These clusters will have integrated ICT infrastructure, marketing, incubation, R&D/test beds and mentoring facilities. Technical and financial support will be extended up to 500 technology companies so as to achieve global foot print.
- vi. A Centre of Excellence will be set up to promote design and development of software products with industry participation.
- vii. A common upgradable infrastructure will be created to support startups and software product designers to identify and plug cyber vulnerability.

3. Skilling and Human Resource Development

- i. For catering to large scale requirement of trained manpower in futuristic technologies, a FutureSkills programme has been initiated for upskilling/re-skilling of 3 million IT Professionals in emerging technologies. For creating a talent pool of 1 million IT professionals with competencies required for IP driven software products, a special emphasis on modules related to software products will be added into the programme. This will be implemented through (i) modification in existing course curriculum, (ii) short term training programme, (iii) national competency tests in consultation with the industry. The programme will be implemented in partnership with educational institutes, both public and private, identified industry bodies and the National Skill Development Mission.
- ii. A national "Talent Accelerator" programme targeting, 100,000 school and college students, will be initiated for motivating young talent for software product development.
- iii. A talent pool of 10,000 committed software product leaders will be created that can meet the distinct skill set requirement for the sector to move up the value chain for developing technology and intellectual capital for product industry and will be suitably interlinked with the mentor pool for software products incubators and clusters.

4. Improving Access to Domestic Market and Cross Border Trade Promotion

- The registry of Indian software products will be integrated with Government e-market (GeM) and will also provide necessary handholding for marketing support.
- ii. Indian Product Startups / MSMEs will be encouraged to develop solutions for Smart Cities, healthcare, agriculture, e-learning, transport, fin-tech and addressing social challenges, such as, bridging digital divide, gender inequality, empowering the less privileged citizens and divyangjans. A series of hackathons will be organised to identify such startups / MSMEs, who will be suitably rewarded on successful development.
- iii. Implementation of open APIs will be proactively promoted both for public and private sector to foster incremental innovation and to encourage inter-operability in Indian software products ecosystem.
- iv. An enabling framework will be developed for preferential inclusion of Indian software product in Government procurement in line with the Public Procurement (Preference to Make in India), Order 2017.
- v. Special focus to Indian Software Products will be provided in international trade development programmes by:
 - a) Integrating Indian software products in India's foreign aid programmes.

- b) Providing opportunities and access under the various market development assistance programmes to showcase innovative products and solutions in important events, exhibitions, trade fairs etc.
- c) Setting-up of specialized infrastructure in India and abroad for Software Product development so as to enhance presence of Indian Innovation in global markets.
- vi. Industry will be encouraged and incentivised to develop products to overcome language barriers across major Indian Languages and to create technological bridges between them and major international languages including English.

5. Implementation Mechanism

- i. The Government shall establish a "National Software Product Mission (NSPM)" to be housed in Ministry of Electronics and IT (MeitY) under a Joint Secretary, with participation from Government, Academia and Industry.
- ii. The broad objectives of the mission will be as follows:-
 - a) Design appropriate strategy for development of the software product industry to ensure optimum utilization of its potential and to establish India as a global Software Product Hub.
 - b) Recommend specific policy measures to ensure an enabling ecosystem for design, development, innovation, value addition, (take other words from Vision), based on use of ICT.
 - c) Recommend specific initiatives to be undertaken to tap the full potential of the domestic and the international markets for the Software product industry.

- d) Monitor and collate various initiatives taken under this policy with an aim to create 3.5 million employment opportunities and boost software products revenue tenfold by 2025.
- e) Facilitate various Government agencies and other bodies in promotion of Software Products, specific to the various programmes envisaged under this policy.
- f) Encourage States to participate in programmes and promote Indian Software Products in line with this policy.
- g) Monitor SPDF, Research & Innovation Fund.
- h) Take any other measures as may be required in the context.
- iii. The Policy will be implemented by MeitY through initiation of appropriate programmes & schemes, as per recommendation of NSPM, in which MeitY's organizations, such as, Software Technology Parks of India(STPI) shall play a lead role besides Centre for Development of Advanced Computing (CDAC), National Informatics Centre(NIC), Industry/ Industry bodies and Institutes of Higher Education & Research.
