



BSA Submission on MeitY's Draft India Digital Ecosystem Architecture 2.0

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Cc: Shri.Rajendra Kumar

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Dear Sir,

Subject: BSA Submission on the draft India Digital Ecosystem Architecture 2.0 (InDEA 2.0)

BSA | The Software Alliance (**BSA**) thanks the Ministry of Electronics and Information Technology (**MeitY**) for the opportunity to comment on the draft India Enterprise Architecture 2.0 (**Framework**).¹

BSA is the leading advocate for the global software industry. Our members are among the world's most innovative companies, creating software solutions that help businesses of all sizes in every part of the economy to modernize and grow.² Many of BSA's member companies have made significant investments in India, and we are proud that many organizations and consumers in India continue to rely on our members' products and services to support India's economy.

Summary of BSA's Recommendations

1. BSA welcomes the Framework's objective of reimagining existing e-governance and public service delivery systems through the creation of digital ecosystems in the public sector. A unified approach to updating government information systems and ensuring protection of trust, privacy, and security of data by embracing a cloud-first approach will help in achieving the Digital India vision.³

¹ MeitY India Digital Ecosystem Architecture 2.0, accessible at: https://www.meity.gov.in/writereaddata/files/InDEA%2020Report%20Draft%20V6%2024%20Jan%202022_Rev.pdf

² BSA's members include: Adobe, Alteryx, Altium, Amazon Web Services, Atlassian, Autodesk, Bentley Systems, Box, Cisco, CNC/Mastercam, Dassault, DocuSign, Dropbox, IBM, Informatica, Intel, MathWorks, Microsoft, Nikon, Okta, Oracle, PTC, Rockwell, Salesforce, SAP, ServiceNow, Shopify Inc., Siemens Industry Software Inc., Splunk, Trend Micro, Trimble Solutions Corporation, Twilio, Unity Technologies, Inc., Workday, Zendesk, and Zoom Video Communications, Inc.

³ Digital India, Vision and Vision Areas, accessible at: [Vision and Vision Areas | Digital India Programme | Ministry of Electronics & Information Technology \(MeitY\) Government of India](#)

2. BSA recommends streamlining existing government procurement processes — particularly those relating to software.⁴ The current policy set out in the Department of Promotion of Industry and Internal Trade's (DPIIT) Public Procurement Preference to Make in India Order (Order),⁵ imposes local content requirements which adds complexity to the procurement of software products and services and disallows Indian government agencies from accessing best-in-class software solutions. For these reasons and others, we strongly encourage MEITY to remove local content requirements for software products and services to better align with the vision of InDEA 2.0, as set out in the Framework.

To this end, this submission covers: (i) general comments on the Framework; and (ii) specific comments on the need to update the software procurement framework.

1. General comments

a. Focus on “cloud-first”

BSA welcomes the Framework's focus on the “cloud-first” principle for the InDEA ecosystem.⁶ Cloud technologies are a key driver for digital transformation and can help meet the Framework's goals of enabling a secure digital architecture for governance and service delivery. It can improve the quality of services, strengthen cybersecurity, and increase the versatility and resiliency of government departments.

We also support the need for government departments to safeguard information systems managing confidential and sensitive data. Data classification guidance — as the one set out in the Framework — help organizations make determinations for safeguarding sensitive or critical data with appropriate levels of protection.⁷ At the same time, public sector entities around the world are using cloud services for operations and workloads where information security is most required. Such organizations recognize the many security-focused benefits of high-quality cloud computing services. Cloud services could enable secure handling of sensitive personal information using internationally recognized functions such as encryption, zero-trust architecture, and advanced access management supported by the most secure infrastructure available in the world. This provides effective data security solutions to protect sensitive personal information and other categories of data.

A ‘cloud-first’ approach needs to be supported by data governance policies that facilitate cross-border data transfers. Cross-border data transfers enable enterprises and governments to fully leverage the benefits of cloud-based services, which include economies of scale, allowing customers to receive cutting edge data services on-demand and with much lower upfront costs, enhanced security through state-of-the-art technical solutions and redundant data storage and back up in data centers in different locations, and always on data services available worldwide.

⁴ BSA Strengthening Trust, Safeguarding Digital Transformation, accessible at: <https://www.bsa.org/files/policy-filings/10132021bsacybersecurityagenda.pdf>

⁵ Public Procurement (Preference to Make in India), Order 2017 – Revision, published by DPIIT available at: <https://dipp.gov.in/sites/default/files/PPP%20MII%20Order%20dated%2016%2009%202020.pdf>

⁶ Section 2.4.1 of the Framework

⁷ Section 2.4.1 of the Framework

b. Security-by-design and privacy-by-design principles

BSA supports the Framework's focus on concepts such as Security-by-Design and Privacy-by-Design.⁸ The Framework also suggests that the privacy policies of government departments should be aligned with key principles such as provision of notice, choice and consent, purpose limitation, collection limitation, and others. It also suggests that public sector organizations should design and enforce a cybersecurity policy that conforms to the principles of security-by-design. BSA strongly supports these principles. Specifically, we applaud the Framework's recognition of leveraging internationally recognized security standards. This will help alleviate the security burdens of both private and public stakeholders involved in the InDEA ecosystem.

In addition, as Government of India updates technical standards to support the data ecosystem (as articulated at 2.4.5 in the Framework), they should be aligned with internationally recognized standards to ensure interoperability and minimize possible disruption to services.

c. Government data sharing and Open Data

The Framework aims to enhance the utilization and benefits of government data by proposing to create data sharing policies and designing data systems — such as data exchanges — that increase data value and enable its regulated exchange for different purposes.⁹ The Framework also states that the private sector may adopt such data sharing frameworks on a voluntary basis. Government-generated data is an important asset that can serve as a powerful engine for public service delivery, policymaking, creating new jobs, promoting economic growth, and enabling innovation.¹⁰ BSA supports these objectives, and efforts to realize the benefits of data by advancing responsible policies that facilitate sharing, collaboration, and experimentation with data resources while protecting privacy, security, and the proprietary nature of data. As such, we support efforts to promote sharing of government-generated data and the establishment of voluntary data sharing collaborations with the private sector.

We also support the Framework's encouragement to policy enablers on open data. BSA promotes open data policies and encourages governments to embrace opportunities that arise when non-sensitive data is made open by default.¹¹

d. Flexible and agile procurement processes

We appreciate the Framework's recognition of the need to develop new procurement processes to enable the InDEA vision. Flexible and agile procurement processes without burdensome terms and conditions will allow government departments to fully leverage the benefits offered by cloud services.

In particular, we encourage the Framework to explicitly allow for cross-border data transfers for public sector applications as data localization requirements incur high implementation costs and generally do little or nothing to improve data security. This will enable more government departments to benefit from the innovation, and efficiency of cloud computing services available globally.

⁸ Section 2.4.6 and Section 2.4.7 of the Framework

⁹ Section 2.4.3 of the Framework

¹⁰ Section 1, Page 1 of BSA Open Data Agenda, accessible at: <https://www.bsa.org/files/policy-filings/061120bsaopendata.pdf>

¹¹ Section 1, Page 2 of BSA Open Data Agenda, accessible at: <https://www.bsa.org/files/policy-filings/061120bsaopendata.pdf>

2. Streamlining the existing policy for software procurement

BSA strongly encourages public procurement policies that establish an environment of certainty for companies to drive increased investments in developing the best solutions for India, with the confidence that these technologies are secure, interoperable, and efficient. Adopting these principles can empower the Indian government to harness the vast potential of software and IT solutions to realize the vision set out in the Framework and meet the needs of Indian citizens and institutions in new and innovative ways.

However, the Framework lists the Government eMarketplace (**GeM**) as a building block for government procurement. GeM requires sellers to adhere to local content requirements set out in the DPIIT's Public Procurement Preference to Make in India Order (**Order**).¹² Local content requirements, especially for software, create difficulties as the nature of software products and services makes it difficult to determine local content given the transnational supply chains and diversified nature of the software development and deployment processes. These concerns are exacerbated by a 2021 DPIIT [memorandum](#) clarifying that suppliers offering 'imported' content cannot include after-sales service, support, training, installation, etc. as local value addition.

The continued implementation of these undue restrictions will negatively impact the Government of India's ability to achieve the goals set out in the Framework. To this end, we recommend MeitY to revise and streamline the existing framework for public procurement of software products and services. BSA had communicated our concerns and recommendations to MeitY in a [letter](#) dated June 04, 2021.¹³ These are restated below:

i. Increase in ambiguity for both buyer and service provider

It is difficult or impossible to determine the contribution of particular locations to the overall value of software. The requirement to demonstrate or attest to local content to qualify for listing on GeM creates unnecessary barriers and complexities in leveraging state of the art software products and services. Failing to consider the specific nature of software products and services and how they are developed and treating them as traditional goods or services increases ambiguity in the procurement process for both buyers and sellers of software products and services, and deprives software products and service providers of reasonable opportunities to compete for government procurement.

ii. Uncertainty deters investment and job creation

BSA member companies invest substantially in India and have extensive operations and world-class Research and Development (R&D) centers developing cutting-edge technology solutions, products, and services in India that support the global market. These activities and operations generate significant employment in India. Furthermore, employment by BSA members contributes to improving the skills of the digital economy workforce in India through both formal and on-the-job training. Excluding or limiting many BSA member company software products and services from public procurement opportunities because they are unable to demonstrate local content discourages such investments and job creation efforts.

¹² Public Procurement (Preference to Make in India), Order 2017 – Revision, published by DPIIT available at: <https://dipp.gov.in/sites/default/files/PPP%20MI%20Order%20dated%2016%2009%202020.pdf> ; and <https://pib.gov.in/PressReleasePage.aspx?PRID=1633511>

¹³ BSA Letter to MeitY on 'Challenges in Public Procurement of Software Products and Services' available at: <https://www.bsa.org/files/policy-filings/06042021softprocurementmeity.pdf>

iii. Lack of local capacity in specialized software services

BSA members provide a wide range of specialized software products and services for which specific local capacity may not exist. By discouraging the procurement of software products and services by insisting on local content, the existing procurement framework prevents procuring entities from accessing specialized products and services available in the global market, which may in-turn result in operational disruptions and inefficiencies.

iv. Lack of focus on technical merits and quality of services harms the digital ecosystem

The rapid adoption of software-enabled solutions as a result of responding to and recovering from the COVID-19 pandemic presents an enormous and consequential opportunity to truly transform the public sector in India. The procurement of software products and services should be based on their technical merits, product quality, functionality, and efficacy, regardless of where such products and services are developed or manufactured. Focusing on issues of origin rather than the product merits limits the choice and use of cutting-edge innovation in India, and ultimately weakens the foundations of 'Digital India' and Prime Minister Modi's goal of \$1 trillion in value from the digital economy by 2025. It also exacerbates cybersecurity challenges that otherwise are addressed by the world-class cybersecurity capabilities and R&D efforts of BSA members.

For these reasons and others, we strongly encourage MEITY to remove local content requirements for software products and services. We thank you for the opportunity to provide our recommendations to implement the InDEA vision. Please do not hesitate to contact us if you have any questions regarding this submission.

From

BSA | The Software Alliance