

20 November 2019

To
Shri. Asit Kadayan,
Advisor (QoS),
Telecom Regulatory Authority of India (TRAI), Mahanagar Door Sanchar Bhawan,
J.L. Nehru Marg, (Old Minto Road), New Delhi - 110002, India

Dear Sir,

On behalf of the Asia Internet Coalition (“AIC”) and its members, I am writing to express our sincere gratitude to the Telecom Regulatory Authority of India (“TRAI”) for the opportunity to submit comments on the Consultation Paper on Cloud Service dated October 23, 2019 (“CP”). AIC is an industry association comprised of leading Internet and technology companies in the Asia Pacific region with an objective to promote the understanding and resolution of Internet and ICT policy issues. Our current members are Airbnb, Amazon, Apple, Expedia Group, Facebook, Google, Grab, LinkedIn, LINE, Rakuten, Twitter and Yahoo (Oath), and Booking.com. To further its mission of fostering innovation, promoting economic growth, and empowering people through the free and open internet, AIC would like to present our comments on the Consultation Paper.

We commend TRAI on formulating the consultation paper, with an objective to promote the National Digital Communications Policy-2018, and position India as a global hub for cloud computing, content hosting and delivery, and data communication systems and services. The growth of Cloud Computing (CC) Services have transformed the way governments, enterprises, consumers etc. store and process their data and manage their resources. We strongly believe that by addressing the concerns of cloud users, cloud services may witness growth of cloud computing to the next level.

As responsible stakeholders in this policy formulation process, we appreciate the ability to participate in this public consultation and submit our views. Our preliminary view on the issue is provided in Section I of this response. Section II specifically addresses the questions raised by TRAI in the CP.

As such, please find appended to this letter detailed comments and recommendations, which we would like to respectfully request TRAI to consider when reviewing the consultation paper.

Should you have any questions or need clarification on any of the recommendations, please do not hesitate to contact our Secretariat Mr. Sarthak Luthra at Secretariat@aicasia.org or at +65 8739 1490. Importantly, we would also be happy to offer our inputs and insights on industry best practices, directly through meetings and discussions and help shape the dialogue for the advancement of cloud services in India.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jeff Paine".

Jeff Paine
Managing Director,
Asia Internet Coalition

Section I: Preliminary View

1. Existing frameworks

The market for cloud services has seen exponential growth in the past few years and is projected to continue on a trajectory of growth making significant contributions to the Indian economy. According to a recent estimate by NASSCOM, growing adoption of Big Data, AI and Internet of Things is expected to make the cloud market in India grow threefold to \$7.1 billion by 2022. It is also estimated to constitute a significant percentage of India's total IT spending. In 2019 itself, India's public cloud services will record the third-highest growth rate globally.¹

India's relatively light touch framework of cloud service regulation has contributed significantly to the growth of this sector in the recent past, and for the unprecedented amount of cloud adoption by all businesses, big and small. In particular, it is noteworthy that even regulated sectors such as banking and financial services, have adopted cloud services while complying with the norms set by the Reserve Bank of India ("RBI").

While remaining light touch to the extent that it permits important innovations in the industry, the Indian regulatory framework is nevertheless comprehensive enough to address all major concerns that arise in the context of cloud adoption. To give an indicative overview of some of the regulations that shape the cloud sector:

- a. **Data protection / security** – Data protection and data security measures as applicable to all body corporates under the Information Technology Act ("IT Act") and Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011 ("SPDI Rules") also govern cloud service providers ("CSPs"). CSPs will also be subject to the forthcoming Personal Data Protection Bill, 2018 ("PDP Bill") which provides various obligations for 'data processors'². As CSPs are likely to qualify as 'data processors' under the draft PDP Bill, they will have to comply with those obligations.

- b. **Guidelines / laws pertaining to government procurement of cloud services:** The Government has conceptualised the MeghRaj (Government Cloud) initiative to provide a

¹ Gartner Forecasts Public Cloud Services Revenue in India to Grow 24% in 2019, Gartner, 18 June 2019, <https://www.gartner.com/en/newsroom/press-releases/2019-06-18-gartner-forecasts-public-cloud-services-revenue-in-in0>.

² See clause 31 of the Personal Data Protection Bill, 2018, https://meity.gov.in/writereaddata/files/Personal_Data_Protection_Bill,2018.pdf.

unified strategy for the adoption of cloud computing by various government agencies including Central and State Government departments. As part of this initiative, the Ministry of Electronics, Information and Technology (“**MeitY**”) has released various documents which provide guidance for government departments seeking to adopt or migrate to the cloud.

- c. **Laws applicable to the financial sector:** The RBI has specified detailed compliance in relation to the adoption of third-party service providers by banks, NBFCs etc. through the Outsourcing Guidelines applicable to each such entity. Corresponding regulations exist in respect of the insurance sector as well as financial intermediaries. Further, the framework for adoption of IT services are specified in the Cybersecurity Framework in Banks, 2016 and similar frameworks for other financial sector players. These players are also subject to a very high degree of data security requirements. Notably, the payments sector is subject to a strict localisation of all end-to-end transaction information. The market for cloud services in India have evolved to permit compliance with all these regulations by permitting flexibility in terms of data storage locations and very high quality of services in terms of data security, redundancy, etc.
- d. **Laws applicable to the telecom sector:** The telecom sector is governed by provisions of the Unified License that impose conditions which are met by cloud service providers when providing services to telecom licensees. Further, the DS Cell of the DoT periodically publishes [template contractual clauses](#) for TSP vendors.
- e. **Law enforcement access:** As cloud service providers are viewed as intermediaries under the IT Act, therefore the law enforcement access procedures envisaged under the Information Technology (Intermediaries Guidelines) Rules, 2011 (“**IG Rules**”) are applicable to them as well as other procedures under law that allow for information access.

In light of the above, it is apparent that that the cloud sector is sufficiently regulated and is very responsive to the varying needs of several different sectors (public sector, financial sector, telecom sector, etc.) leading to widespread successful instances of cloud adoption across the spectrum. It is unclear, therefore, why there is a need for a unifying regulatory framework for all manners of cloud services when the market-responsiveness of the sector is already leading to significant leaps in cloud adoption, and there appears to be no concerns raised by systemic failures in the industry, where a regulator would otherwise be required to step in.

2. Role of TRAI

The powers of the TRAI, as derived from the Telecom Regulatory Authority of India Act, 1997 (“**TRAI Act**”), pertain to the regulation of “service providers” in the telecom sector. The definition of “telecommunications services” under law, as well as what is understood in common parlance, encompasses access services, internet services, and other connectivity services, which are *used* by cloud service providers but do not constitute the same bouquet of services.

The functions of TRAI are set out in Section 11, and these functions are of the following kinds:

- (i) providing recommendations (e.g. TRAI can recommend changes to terms and conditions for licenses or conditions for revocation);
- (ii) regulatory (e.g. ensure compliance with the terms of license, regulate inter-connectivity);
- (iii) levying fees and charges; and
- (iv) other functions as notified.

The TRAI’s key functions involve regulation of “service providers” specifically. A “service provider” is defined in the TRAI Act as either a government service provider, or a licensee under Section 4 of the Telegraph Act. This presupposes the existence of a licensing regime in reading Section 11. As cloud service providers do not fall under the definition of “service providers” under the TRAI Act, it is unclear where the TRAI derives its powers to create a regulatory framework for cloud service providers.

Section II: Addressing Specific Questions

Questionnaire by TRAI along with Responses

- 1. Whether there should be single industry body or multiple industry bodies of cloud service providers which may be registered with DoT? If multiple industry bodies, whether there should be any cap on their number? Should the industry bodies be registered based on the category or type of CSPs? Can a CSP be a member of multiple industry bodies? Please suggest with justification.**

Response: This question presupposes the existence of one of multiple overarching industry bodies for cloud services, and the TRAI’s supervisory jurisdiction over the same. We have already highlighted that one of the key factors leading to the quick and widespread adoption of cloud

services is the flexibility which is offered by each such service provider as a response to the regulatory framework relevant to the customer segment. To preserve this flexibility, it is important not to classify all cloud service sectors under a single regulatory framework – as it risks sacrificing some of the responsiveness of the sector. This would remain a relevant concern whether there is one or more industry body in the market.

It would also be relevant to note that differences in approach of different industry bodies could lead to incongruous standards being mandated across the CSP sector. The CP itself has highlighted that too many bodies might create confusion in consumers’ mind and may also cause problems in terms of conflicting positions taken by different bodies and due to multiple communication channels between DoT and different industry bodies. The CP notes the high risk of fragmenting the cloud market by taking this approach. On the other hand, a single industry body would lead to competitive concerns and entry barriers to new players. Therefore, the very approach of registering industry bodies should be reconsidered.

The suggestion to fragment industry body by type of CSP or deployment model is fundamentally flawed insofar as nearly all CSPs provide flexibility in terms of type of service and deployment model based on the needs of the customer segment, and forcing them to stick to one kind of service delivery model would be detrimental to the needs of the sector.

As discussed in Section I, we submit that CSPs in India should not be subject to regulation by the Department of Telecommunications (“**DoT**”) or the **TRAI**, directly or indirectly. CSPs are already subject to existing laws and governed by the **MeitY**, as described below:

1. **Cloud services are governed by MeitY:** MeitY is tasked with developing policies for information technology and the Internet under the Allocation of Business Rules³. MeitY already governs empanelment of CSPs as government-approved service providers under its ‘MeghRaj’ cloud computing initiative⁴. To be empaneled, CSPs must demonstrate compliance with standards on security, interoperability, data portability, service level agreements, and contractual terms and conditions⁵. Compliance by CSPs is verified through a rigorous audit conducted by the MeitY’s Standardisation Testing and Quality

³ Pg. 51, Government of India (Allocation of Business Rules) 1961 (as amended up to 04 April 2019), available at https://cabsec.gov.in/writereaddata/allocationbusinessrule/completeaobrules/english/1_Upload_1829.pdf [MeitY-“Policy matters relating to information technology; Electronics; and Internet (all matters other than licensing of Internet Service Provider)”]; “Promotion of internet, IT and IT enabled services”].

⁴ GI Cloud (Meghraj)- A cloud computing initiative of MeitY, available at <http://meity.gov.in/content/gi-cloud-meghraj>. (“MeitY cloud computing initiative”)

⁵ Invitation for application/proposal for empanelment of cloud service offerings of CSPs, Ministry of Electronics and Information Technology, Government of India, available at <http://meity.gov.in/writereaddata/files/Application%20for%20Empanelment%20of%20CSPs.pdf>.

Certification Directorate⁶. As the government agency responsible for cloud services, MeitY will step in to govern other aspects related to cloud services if needed.

2. **Lack of jurisdiction:** The TRAI Act clearly states that TRAI’s mandate is to “*regulate telecommunications services*”⁷. The powers and functions allocated to TRAI under this law are limited to handling different aspects of telecommunications services alone, with no mention of information technology (“IT”) services⁸. Cloud computing services are IT services, and not telecom services. As CSPs are IT service providers and not telecom service providers, they cannot be regulated by TRAI.
3. **CSPs are regulated by existing laws:** CSPs are already subject to regulatory requirements under different laws:
 - CSPs qualify as an ‘intermediary’ under the Information Technology Act, 2000 (“IT Act”), and have to comply with various provisions under the IT Act including obligations for data protection⁹, cooperation with government authorities¹⁰; and due diligence requirements¹¹.
 - Since CSPs use e-contracts such as terms of use and click-wrap agreements, they must also comply with the Indian Contract Act, 1872.
 - CSPs will also be subject to the forthcoming data protection law, once it is passed by the Parliament. The draft Personal Data Protection Bill, 2018 (“PDP Bill”) provides various obligations for ‘data processors’¹². As CSPs are likely to qualify as ‘data processors’ under the draft PDP Bill, they will have to comply with those obligations.
4. **Cloud services are provided through telecom infrastructure, which is already regulated:** Customers use network connectivity provided exclusively by TSPs for accessing CSPs’ cloud services, while CSPs use telecom infrastructure for connecting their data centres. TSPs and the telecom services they provide are already heavily regulated.

⁶ MeitY cloud computing initiative.

⁷ Preamble, TRAI Act, *available at* http://www.dot.gov.in/sites/default/files/TRAI%20Act%20%282%29_0.pdf?download=1. See also, amendment to the preamble, *available at* http://www.dot.gov.in/sites/default/files/TRAI_amendment_ACT.pdf?download=1.

⁸ Section 11(1), TRAI Act.

⁹ Section 43A, Information Technology Act, 2000 (“IT Act”).

¹⁰ Section 69, IT Act.

¹¹ Section 79, IT Act; Rule 3, Information Technology (Intermediaries Guidelines) Rules, 2011.

¹² See clause 31 of the Personal Data Protection Bill, 2018, https://meity.gov.in/writereaddata/files/Personal_Data_Protection_Bill,2018.pdf.

These regulations adequately serve the purposes of protecting customers, maintaining public network security and integrity, and enabling the Government to monitor and obtain information on transmission of data (e.g., for national security purposes). Thus, CSPs need not be licensed/regulated separately.

Since CSPs are already governed by the MeitY and regulated by existing laws, we believe there is no need for any intervention by DoT/ TRAI through an industry body or otherwise. Any additional regulation will create overlapping or conflicting requirements and hinder the growth of cloud services in India.

In addition, we submit that the present consultation paper is a departure from TRAI's own recommendation for 'light touch regulation' of CSPs. In 2017, the TRAI had expressly recommended adopting a 'light touch regulatory approach' for cloud services¹³. However, several proposals in the present consultation paper indicate that instead of following this approach, the DoT would exercise regulatory control over CSPs indirectly. For example, both the registered industry body and its CSP members 'may' be required to comply with the orders/directions issued by the DoT. The industry body and CSP members may also be required to furnish such information as is sought by the DoT/TRAI. The paper also prescribes mandatory provisions for the code of conduct of the industry body. These provisions in the code of conduct cover various aspects of the industry body such as membership and working groups to be formed. Besides this, it also covers various aspects of CSPs such as quality of service parameters, billing and dispute resolution framework. These provisions go against the idea of a 'light touch regulatory approach', and will instead curb the freedom of business of the CSPs registered with the industry body.

The government should consider CSPs as regular business entities which are registered to conduct business in India under its existing laws. In order to ensure unhindered growth and innovation in the cloud services market in India, CSPs should not be subject to any further regulation through an industry body or otherwise.

¹³ Pg. 36, para 4.1(i), chapter 4, TRAI Recommendations on cloud services, 16 August 2017, https://main.trai.gov.in/sites/default/files/Recommendations_cloud_computing_16082017.pdf.

2. What should be the eligibility criteria for an Industry body of CSPs to register with DoT? What is the list of documents that should be required to be submitted as proof of eligibility? What obligations should be cast upon the Industry Bod(y)(ies) after registration with DoT? Please suggest with justification.

Response: We submit that the CP in general, and the references to registration with the Department of Telecommunications (“DoT”) in particular, constitute a significant departure from TRAI’s own recommendation for ‘light touch regulation’ of CSPs in 2017.¹⁴ Therefore, such a registration requirement should not be presupposed.

We note that several proposals in the CP indicate that instead of following a light touch approach, the DoT would exercise heavy regulatory control over CSPs. For example, both the registered industry body and its CSP members may be required to comply with the orders/directions issued by the DoT. The industry body and CSP members may also be required to furnish such information as is sought by the DoT/TRAI. The CP also prescribes mandatory provisions for the code of conduct of the industry body. These provisions in the code of conduct cover various aspects of the industry body such as membership and working groups to be formed. It also covers various aspects of CSPs such as quality of service parameters, billing and dispute resolution framework. These provisions go against the idea of a ‘light touch regulatory approach’ and will instead curb the freedom of business of the CSPs registered with the industry body.

CSPs should be considered as regular business entities which follow applicable law to conduct business in India. In order to ensure unhindered growth and innovation in the cloud services market in India, CSPs should not be subject to any further regulation through an industry body or otherwise.

3. What may be the threshold value of parameters such as the volume of business, revenue, number of customers etc. or combination of these for a CSP to mandatorily become member of a registered Industry body? Please suggest with justification.

Response: The factors referred to in this question refer to eminently changeable parameters and should not be the basis for any kind of regulation. Please also note the disadvantages of registering industry bodies as noted in Q. 1 and 2 above.

¹⁴ Pg. 36, para 4.1(i), chapter 4, TRAI Recommendations on cloud services, 16 August 2017, https://main.trai.gov.in/sites/default/files/Recommendations_cloud_computing_16082017.pdf.

4. Whether entry fee, recurring fee etc. need to be uniform for all members or these may be on the basis of type or category of members? How such type or category can be defined? Should such fee be prescribed by DoT or be left to be decided by the Industry body? Please suggest with justification.

Response: Assuming that any industry body is formed for the purposes envisaged by TRAI, any fees imposed for registration should be nil or left to the relevant bodies to decide, as the powers provided to DoT under the Telegraph Act do not permit it to fix such fees. The fees that it may fix are specifically provided in the law, such as license fees. Registration fees for CSPs to become part of an industry body would not fall under the clearly stated powers of either the DoT or the TRAI under extant Indian law. This could open up any such recommendation to a plethora of legal challenges.

From a business perspective, the scope for regulatory confusion already highlighted in the previous responses could be potentially compounded by overlapping and contradictory fee structures. Hence, it would not be strategically appropriate to impose such requirements through regulation.

5. What should be the guiding principles for governance by an industry body? How would these principles/ organisation structure ensure fair, reasonable and non-discriminatory functioning of body? Should structure of Governance be prescribed by DoT or should it left for the industry body to decide? How can the industry body achieve the desired deliverables efficiently and effectively? Please suggest with justification.

Response: The CP lists out multiple bodies such as NASSCOM and TSDSI which operate effectively and represent the interests of several industry participants without any regulatory framework being imposed upon them from the government. The key lesson from the analysis conducted by the CP is that the voluntary nature of these bodies, their diverse vision statements, and their specific governance structures which are aligned with the same, contribute meaningfully towards making them useful and functional to the industry while also being a channel of communication with the Government and with regulators. Therefore, we recommend leaving the structure of industry bodies to be decided upon by the relevant bodies and retaining the voluntary nature of subscribing to such bodies as is the norm at present.

**6. What policy may be adopted for initial formation of industry body for cloud services?
Please suggest with justification.**

Response: The CP considers 4 possible options for the initial formation of the industry bodies: (a) Nomination of existing industry body; (b) allowing CSPs to form industry bodies and adopt a code of conduct; (c) recognize a not-for-profit and approve the by-law and memorandums to enable it to function for the purposes envisaged within the CP; (d) DoT establishing an ad-hoc industry body.

Without prejudice to the previous submissions, if this approach is nevertheless followed by TRAI, we recommend allowing CSPs to form a body and adopt their own code of conduct. This may allow more flexibility which is important for innovations and would also permit CSPs to explore alliances with global efforts already underway to set standards in cloud services.

7. Any other issue which is relevant to this subject? Please suggest with justification.

Response: Please see response to Question 1. CSPs are already adequately governed by the MeitY and are subject to existing laws. Any additional regulation by DoT/ TRAI through an industry body or otherwise creates the risk of overlapping or conflicting regulatory regimes. This will hinder growth of cloud services in India.