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Sistema Shyam TeleServices Limited [SSTL]'s comments/response to Questions/Issues for Consultation in Pre-Consultation Paper on Net Neutrality issued by Telecom Regulatory Authority of India [‘TRAI’] on 30.05.2016

1. The Internet has changed the world and day-to-day life of billions of people for good. It has provided opportunities for innovation and among others has fostered supremacy of ideas. It is a public resource with no ownership but is available to all. Some of the benefits of internet include:-
 - (a) Providing access to a range of products and services.
 - (b) Access to use literature and opinions from varied sources improving the quality of debate.
 - (c) It has enabled service providers and the content owners to develop innovative applications which are then put on a large market, with no or minimal entry barriers.
2. The main characteristic or fundamental principle as enunciated by Tim Berners Lee in regard to the internet is *“all of the internet, all of the people, all of the time”*. SSTL supports and adheres by this fundamental principle.
3. In the Indian context, it is a fact that most of the Indians get their first internet experience on mobile phones. Though the penetration of the internet is low at this stage, the opportunities are enormous and the growth curve is huge. Government of India has also put a lot of stress on providing internet connectivity to all through various schemes such as ‘Digital India’ and ‘Broadband for all’. The reason for this push is obvious – the enormous opportunities and avenues offered by internet. While on the one hand, it can be used for educating a large section of society on various issues, on other hand, it has because of its openness, granted immense opportunities to develop innovative applications etc.
4. Net neutrality issues have been raised a number of times before and are subject matter of debate in the entire world. It is laudatory on the part of TRAI to issue Pre-Consultation Paper seeking comments from stakeholders on net neutrality.
5. The present Pre-Consultation Paper, as has been noted by TRAI, seems to be an attempt to identify the relevant issues on net neutrality, traffic management techniques, economic security and privacy aspects of the OTT services etc., and to formulate the way forward.
6. The questions as framed in the Pre-Consultation Papers seem to be in three parts i.e. relating to:-
 - (a) Net neutrality and traffic management issues;
 - (b) National security and customer privacy issues in the context of net neutrality;
 - (c) Relationship between TSPs and OTTs players.



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7. SSTL seeks to deal with the above issues and provide its views as set out below:

NET NEUTRALITY AND TRAFFIC MANAGEMENT ISSUES

QUESTION 1: What should be regarded as the core principles of net neutrality in the Indian context? What are the key issues that are required to be considered so that the principles of net neutrality are ensured?

8. SSTL is firmly of the view that net neutrality is essential for the development of the internet across India. While the concept of net neutrality is understood in varied manners by different stakeholders, as has been recognized by DoT and TRAI, there are certain attributes which form the core principles of net neutrality. These core principles are as under:-
- (a) Unfettered right of user to make an informed choice in deciding content/services to access.
 - (b) No discretion to TSPs to censor or block access to any legal content, applications, services, or non-harmful devices or determine how users use internet.
 - (c) No right of TSPs to throttle lawful internet traffic on the basis of content, applications, services or non-harmful devices.
 - (d) No right of TSPs to speed-up/favour lawful internet traffic over other lawful traffic in exchange for consideration of any kind.
 - (e) Critical that there be a level playing field for all internet platforms and services including particularly entrepreneurial start-ups so that they are not squeezed out by either TSPs or large/global internet platforms and service providers through anti-competitive tie-ups or practices.
 - (f) Reasonable network management – other than for paid prioritization, a TSP may engage in reasonable network management considering the need of TSP to efficiently manage the health, technical and other aspect of their networks.
9. Having enunciated the core principles of net neutrality, one of the key issues required to be considered to ensure compliance of these principles is the existing regulatory and pricing arbitrage between TSPs and OTTs, more particularly since OTTs use substantially more bandwidth, which unnecessarily puts constraints on service delivery and availability of bandwidth for other TSP traffic.
10. In this context, traffic management principles which have been elaborated in greater detail in response to Question 2 need not be interfered with and TSPs must be given free hand to reasonably manage traffic in accordance with the core principles of net neutrality, which is necessary for network efficiency. This is all the more important as presently TSPs and OTTs both provide similar voice service – while TSPs are subject to various regulatory and licensing requirements, there are no such obligations placed on OTTs. As a consequence, there exists a substantial regulatory and pricing arbitrage between OTTs and TSPs creating a non-level playing field between OTTs and TSPs as both compete for users of the same voice



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communication service in a competitive market. Therefore, it is necessary to devise some sort of regulatory framework to oversee OTTs in a manner similar to TSPs.

QUESTION 2: What are the reasonable traffic management practices that may need to be followed by TSPs while providing Internet access services and in what manner could these be misused? Are there any other current or potential practices in India that may give rise to concerns about net neutrality?

11. Traffic management, which has always been an important tool for TSPs in meeting the needs of internet users and which is likely to become all the more important with the emergence of new technologies such as VoIP, may be described as including the various methods used by TSPs to ensure efficient management of data traffic across networks. It is must for effective network management for reasons including maintaining health of network, emergency services and minimizing congestions. Traffic management is necessary to enable the service providers to manage volumes, provide time critical services and to safeguard the network from malware etc.
12. The main objective of the traffic management is to efficiently use the network resources, to optimize the overall transmission quality, to prevent network congestion resulting in lower QoS (congestion results); to block certain specific content in terms of any law or court orders; to protect integrity and security of the network against cyber-attack etc. The availability of spectral resources also plays a role. The low availability of spectral resources also restricts TSPs ability to provide unrestricted internet access.
13. SSTL believes and as also can be seen from the international best practices, unfettered right of traffic management may go against the core principles of net neutrality. The reasonable network management practices in transparent manner have to be adopted.
14. Some of the practices that may be considered for reasonable traffic management and operators may resort are as follows:-
 - (a) Congestion control e.g., when a source of traffic is slowing down the network due to packet loss
 - (b) Prioritisation of certain data e.g., time sensitive data like VoIP, or emergency services
 - (c) Optimal services to consumers by packet prioritization/de-prioritization, data compression, encrypting secure information, adopting fair use policies regarding usage allowances etc.
 - (d) Differential throttling: this technique is for content that is bandwidth hungry and non-time-critical. This can also ensure differentiated delivery of various OTT services depending on various agreements with the App companies. Also, if the users exceed the data cap, the speeds are throttled.
 - (e) Blocking: End-users may be prevented from using or accessing a particular website or a type of content (e.g. the blocking of VoIP traffic on a mobile data network). Blocking may be implemented to:



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- (i) Manage costs, particularly where the cost of carrying a particular service or type of service places a disproportionate burden on the access provider's network;
 - (ii) Block undesirable content such as child abuse, viruses or spam. This may be necessary to comply with government or court orders, or done at the request of the end user.
15. SSTL in this context seeks to refer to European Parliament Rules of Transparency (Regulation 2015/2012) which casts obligation on operators to inform the users among others the following:-
- (a) Information of how traffic management measures applied by an operator could impact on the quality of internet access services, privacy of end-users and on the protection of their personal data.
 - (b) Clear and comprehensible explanation as to how any volume limitation, speed and other quality of service parameters may in practice have an impact on internet access services, and in particular on the use of content, applications and services.
 - (c) Clear and comprehensible explanation of how any services to which the end-user subscribes might in practice have an impact on the internet access services provided to that end-user.
 - (d) Clear and comprehensible explanation of the minimum, normally available, maximum and advertised download and upload speed of the internet access services in the case of fixed networks, or of the estimated maximum and advertised download and upload speed of the internet access services in the case of mobile networks, and how significant deviations from the respective advertised download and upload speeds could impact the exercise of end end-users' rights.
 - (f) Clear and comprehensible explanation of the remedies available to the consumer in accordance with national law in the event of any continuous or regularly recurring discrepancy between the actual performance of the internet access service regarding speed or other quality of service parameters and the performance.

The providers of internet services are also required to publish the information.

Somewhat similar rules/prescription can be considered for India while permitting operators to manage traffic.

QUESTION 3: What should be India's policy and/or regulatory approach in dealing with issues relating to net neutrality? Please comment with justifications.

16. In the Indian context where internet penetration is not much and the objective is to enhance the penetration, our view is that the fundamental principle of internet, i.e., *"all of the internet, all of the people, all of the time"*, must be adhered to. SSTL supports the aforesaid principle. Apart from the above and as can be seen from international best practices, the core principles of net neutrality in the Indian context can be 'no



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blocking', 'no throttling', 'no paid prioritization', 'freedom of access' and 'to receive or use content', 'no discriminatory practices', 'reasonable traffic management', 'support for innovation' and 'effective competition'.

17. In respect of TSPs and ISPs, license conditions and the legal framework lays down the principles for regulatory oversight as far as providing network services are concerned. In this context, Clause 2.2(i) of ISP License Agreement is relevant which while defining 'internet access', provides for access to the internet of all content available without any access restriction. Similarly, Clause 2.1 of Chapter 9 of Unified License Agreement provides that the subscriber shall have unrestricted access to all the content available on the internet except for such content which is restricted by the licensor/designated authority under law.
18. Clause 10 of Telecommunications Order 1999 prohibits service providers from discriminating between subscribers of the same class and any classification of subscribers shall not be arbitrary.
19. Thus, the regulatory and licensing regime clearly prohibits any discrimination and in fact encourages net neutrality. In our view, there is no requirement of any further regulatory as far as service providers are concerned. However, the OTTs on the other hand, have no regulatory oversight. It becomes imperative that there are proper regulations to monitor OTTs, more particularly when most of the OTTs are not under any regulatory oversight. In fact, OTTs are not even under law enforcement agencies' oversight. Some type of regulations need to be there for OTT players as there are concerns about security and privacy. OTT players must be made accountable to the regulatory and legal authorities in this country. The obligations such as verification of users providing details to LEAs, data protection, should be imposed on OTTs.

SECURITY AND PRIVACY ISSUES

QUESTION 4: What precautions must be taken with respect to the activities of TSPs and content providers to ensure that national security interests are preserved? Please comment with justification.

AND

QUESTION 5: What precautions must be taken with respect to the activities of TSPs and content providers to maintain customer privacy? Please comment with justification.

20. The license conditions in respect of TSPs provide complete code for the issues. TSPs are required to follow all the data protection and security norms. TSPs are under strict obligation of data protection and are always amenable to directions of LEAs. In fact, licensor even has powers to take over in case of breach of obligations. Such conditions are not there for OTTs. There are enough safeguards as far as TSPs are concerned. Similar conditions/obligations should be imposed on OTTs.
21. While local hosting requirements by application service providers have been resorted to by some countries, such conditions are generally termed to be onerous for conduct of legitimate businesses. However, in exceptional cases, such practices should be considered.



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22. Authorised legal entities should be granted access and power to seek lawful interception and/or conduct security audit. Agencies should be authorized to monitor the conduct and content of OTTs and these OTTs may be required to submit reports on quarterly basis to such authorized agencies. There is probably a need to define a new legal architecture for meeting the challenges to security and privacy.

RELATIONSHIP BETWEEN TSPs AND OTTs

QUESTION 6: What further issues should be considered for a comprehensive policy framework for defining the relationship between TSPs and OTT content providers?

23. While OTTs application services must be encouraged as they enhance consumer welfare, certain specific services like voice communication using data, must necessarily be brought within the regulatory framework as they are not covered by the existing licensing and regulatory regime dealing with voice communication services provided by TSPs. This regulatory vacuum creates a non-playing field between TSPs and OTTs, whereas both are competing for same users in a competitive market. Similarly, the pricing issues between TSPs and OTTs for competing services also requires regulatory attention in order to evolve a comprehensive and effective policy framework to achieve the ultimate objective of maximum internet proliferation. SSTL thus firmly supports the 'same service – same rule' policy.
