Session I: Effect on Innovation and Competition

Moderator: Mr. Amlan Mohanty - Associate, Trilegal

Panelists:

1. Mr. Amod Malviya, CTO, Flipkart.
2. Ms. Deepali Liberhan, Manager of Public Policy, Facebook.
3. Mr. Nikhil Pahwa, Founder, MediaNama.
4. Mr. T.V. Ramachandran, Consultant, Policy and Regulatory Affairs at Vodafone and Chairman, ASSOCHAM Telecoms Council.
5. Student Speaker: Mr. Jeydev C.S., II Year B.A., LL.B. (Hons.), NLSIU.

    1. Mr. **Amlan Mohanty** began the proceedings by laying down three core principles of Net Neutrality: first, non-discrimination in relation to access to websites; second, no price differentiation; third, no difference in relation to speed. The conception of Net Neutrality, therefore, has to take into account multiple stakeholders that it has a profound effect on. Chief amongst them are the consumers, entrepreneurs and network providers.

    2. **Ms. Deepali Liberhan** began her comments with the observation that we are all interested in retaining and preserving the openness of the internet. At the heart of the issue of Net Neutrality is the principle that the gatekeeper of internet services shouldn't disadvantage users. Thus, one should be able to access the entire internet; there should be no throttling or no slowing down; and lastly, there should be no fast lane and no one should be able to provide faster access to particular websites. If these principles are not followed, it would end up disadvantaging users.

    3. Ms. Liberhan emphasized that at the same time, the gatekeepers have the job of ensuring that traffic is managed and thus, reasonable traffic management principles should be allowed. She stated that Facebook as a company is strongly committed

to these principles. Next, she spoke about universal connectivity and highlighted that about 250 to 270 million people in India connected through the Internet. However, this is a small percentage of India's 1.2 billion population. Net Neutrality is not inconsistent with universal connectivity and they should go together. All policies should strive towards ensuring all people in the world have access to affordable internet.

4. Ms. Liberhan then drew attention to the fact that 80% of the people in the world live in an area where there is mobile network, but only 30% of the people have internet access. This is because they don't have relevant content and data connectivity. She stated that Facebook doesn't pay operators for data usage. The objective behind the initiative is to increase Internet literacy in a manner that is free and so that the people can ultimately become users of the internet.

5. **Mr. Nikhil Pahwa** stressed that Net Neutrality lets entrepreneurs create new products and gives the people the opportunity to choose what they want. Entrepreneurs don't need to take permission for what they want to do. According to him, this would undergo a massive change if the TRAI recommendations were to be accepted. First, companies operating on the Internet would have to buy a license from the government to operate, and second, the Internet companies would be converted into vendors of network operators. Companies like Flipkart that have come out of nowhere and challenged existing spaces would not be able to compete in such a framework.

6. Mr. Pahwa stressed that the freedom that entrepreneurs currently have to create new products is what users are looking for. This choice gets distorted as soon as things are faster/slower or available/unavailable on the Internet; and no one wants an environment where the freedom to choose is restricted. He gave the example of mobile services wherein content providers were treated as network vendors. It ended up becoming an extremely corrupt system where rupees were taken out of people's prepaid accounts.

7. He asked whether we want the operators to be allowed to control how we access the internet just because they shelled out money to buy the spectrum or do they want neutral internet. He closed by noting that the Internet is a stable where everyone can build their businesses. Entrepreneurs can build it on a host in

the United States or in Finland and still serve Indian users and he stated that that's the Internet he wants.

8. According to **Mr. Amod Malviya,** with the entire economy shifting on to the internet, there is now too much money in the internet space. It is because of the amount of money involved that we need to be doubly careful in making structural changes to the internet since every single player gains exponentially by becoming the gatekeeper. Free services are tactics to infiltrate our devices following which they are used to make money through the data they collect from users. What such a Zero-rating platform does is to create a black hole wherein customers who want free internet get sucked in first, followed by the content providers who are attracted because of the presence of customers. Further, not only does this amount to a wholesale restructuring of the internet, it also ensures that the person controlling the platform has access to the information of all the users. This leads to concentration of power at one point, which is dangerous.

9. **Mr. T.V. Ramachandran,** however, felt that Net Neutrality is a grossly misunderstood concept. *First*, he stated that Net Neutrality as a concept has never existed. The internet was never designed to be neutral and prioritization was built into it. Further, every country has to customize and tailor it according to its own needs. India's position is abysmally low on digital ranks and there is a huge mass of people who are not connected. Thus, in the Indian context, what is needed is net penetration. *Second*, although he agreed that an open internet is of paramount importance and there should be no throttling, blocking or price escalation, he also opined that no futuristic fear should cloud out the present and if there are any unprecedented problems, using institutional mechanisms like the TRAI could always undo any damage done, or any prospective damage.

10. **Mr. Jeydev C.S.,** speaking against Net Neutrality, argued that the very nature of the Internet is such that there can be no stifling of innovation. Users forget the erstwhile dominant websites on the Internet as new and better players emerge. The economics of the Internet is such that Net Neutrality serves no one. Arguing for an abstract notion of Net Neutrality is pointless as neither does the concept really exist nor are there any real benefits of it. Although prima facie, data packets may be equal in what

they represent, they are not actually treated equally. Moreover, network capacities are not endless which means that treating all instant messengers (which are more than twenty in number) would result in congestion, outage and slow Internet. This also poses a risk of crowding out due to the presence of many small businesses that are actually inefficient and serve no purpose, but exist simply because entry to the internet is free.

11. Stressing on the supply side approach, Mr. Jeydev was of the opinion that companies should be able to take advantage of their investments. As far as innovation is concerned, Flipkart was able to provide incentives to customers to move on from their competitor, while Amazon accomplished this through their novel idea of cash on delivery. The absence of neutrality, in his opinion, wouldn't have hurt them because they had an idea with social value.

12. In a competitive commercial environment, if we don't permit the ISP to monetize services, they wouldn't want to invest anymore and this would be very problematic in the face of the systemic failure of government which led to the auctioning of the spectrum in the first place. It is important that investment in internet infrastructure be incentivized. Price discrimination, by itself, doesn't make Zero-rating anti-competitive. And in any case, institutions like the Competition Commission of India are competent enough to deal with anti-competitive behavior if the need arises.

13. However, Mr. Nikhil Pahwa contended that it is not true that Telecom operators do not have any incentive to invest in infrastructure. The CEO of Idea Cellular at a recent conference noted that these companies are in fact increasing investment as they see increasing demand. Thus, there does exist a business case for them to invest as the usage of Internet is growing at an increasing pace. Regardless of Net Neutrality, if companies do not innovate, they will soon die out.

14. On the point of limited network capacity, Mr. Pahwa argued that the Internet is in fact an unprecedented space and no one has agreed on what is important on the Internet. It is a pull-based business and not an audience based service like the television. Even if congestion is experienced, it should be addressed by increasing capacity and auctioning more spectrum and not doing away with Net Neutrality. He stressed that it is important

to not determine the choices of the Internet users and alternatives to Zero-rating such as the free wifi being provided by the Delhi government should be resorted to.

15. Just because the government can't expand the pie, it shouldn't split the pie in a manner that disadvantages the consumers. The march of technology cannot be stopped in any case, and better services have to keep coming up. The opposition is only to collusive prioritization.

16. Mr. Malviya argued that we must deal with the issue of Net Neutrality in a service agnostic fashion. Prioritizing based on how the service is doing will just pollute the discussion. He stated that network capacity is nowhere close to being choked. According to him, spectrum is just the last mile to the tower; the prioritization happens in the bandwidth and fibers.

17. **Ms. Liberhan** argued that the version of Net Neutrality propounded by Mr. Malviya and Mr. Pahwa would disallow internet.org from coming into force. This would mean that the 8 million people it has brought on board would be denied access. She believes such a version of Net Neutrality is blatantly anti-poor. Mr. Jeydev C.S. responded that theoretically, network capacities are not unlimited and given that unlimited expansion is not financially viable, at any given point, there will be a crowding out of better services. Since the vast majority of services are for profit, we need to be conscious of the value being provided by them. Further, the Indian telecom sector today is the most competitive even though there are only 7-8 players. Mr. Ramachandran argued that in fact, Telecom companies are actually in a rut and have no real incentive to invest further in infrastructure. Further, the telecom capacity is limited and therefore, mobile services have deteriorated.

Session II: Privacy, Free Speech and Net Neutrality

Moderator: Mr. Badrinarayanan Seetharaman, Alumnus, NLSIU and Co-Founder, Gathr.

Panelists:

1. Mr. Kiran Jonnalagadda, Founder, HasGeek.
2. Mr. Rishab Bailey, Practicing Advocate and Consultant for Society of Knowledge Commons.
3. Ms. Smarika Kumar, Researcher, Alternative Law Forum.
4. Student Speaker: Ms. Sharada Srinivasan, Graduate Student, Masters in Public Policy, NLSIU.

    1. Mr. **Badrinarayanan Seetharaman** started the discussion by pointing out the major issues that had to be dealt with in the session. The *first* was to understand what governments and companies see when they seek to regulate the internet and how the current framework of the internet functioned in terms of packet transmission. *Secondly*, one had to examine the existing regulatory frameworks and the legal concerns of freedom of speech and expression, and privacy, in light of increased surveillance and security concerns.

    2. Mr. **Kiran Jonnalagadda** started off by talking about the technical framework of data access, explaining how browsers work. He elaborated that the IP simply dealt with the source and destination of the data. By drawing an analogy between IP connections and communication via sending a postcard, he explained how a message reached its destination through distribution and re-assembling through multiple packets of data.

    3. According to him, the content of the message was supposed to be confidential, as the message itself only showed who had sent the message and who was supposed to receive it. In case the recipient did not receive a certain part of the message he could ask for it again. This is an element of the Transmission Control Protocol. However, it was part of the ISP's discretion to read the content of the message and not just the destination of the message, a process referred to as Deep Packet Inspection (DPI).

4. He explained that content is broken up in multiple packets, which means that all packets need to be checked to see the overall message. Government blocking works by checking the content of the packets, and not the header, which most ISPs are unequipped to perform. Subsequently, he demonstrated how faking of IP addresses work whereby a private address could be converted to public, when in fact it is coming from a laptop.

5. He mentioned that every connection from the campus is publicly seen as one computer. Transmission is one way; while we can encrypt our traffic, we can only do so on a public server. He added that the intermediary public server may or may not be trustworthy. He concluded by giving the example of Google Hangouts where the connection is private, but the content itself is not protected.

6. Ms. **Sharada Srinivasan** talked about Iran and other cases of DPI usage, including both in dictatorships and modern western democracies. Indian telecom industries have been asked to consolidate their independent monitoring systems for a centralized model headed by the government, along with NETRA. She lamented the broad mandate for surveillance, without a uniform privacy framework. However, she also mentioned that DPI is used to protect people from SPAM and malware attacks, and even child pornography control in Australia, as well as security for London Olympics.

7. She asked if we can regulate DPI, our privacy framework and find ways to ensure and enhance privacy. She concluded by giving the example of Netherlands where wiretapping is only allowed in certain instances and ISPs can't throttle or tap except for very specific circumstances.

8. Mr. **Rishab Bailey** started by talking about privacy laws and disparate viewpoints about surveillance and Net Neutrality. In his opinion, there is merit in examining Net Neutrality not merely from a commercial framework, but in a holistic, rights-based perspective.

9. He discussed the link between neutrality and surveillance. He stated that in the current paradigm there is no inbuilt privacy mechanism. With the increase in load on bandwidth, there is immense support for surveillance. The more private a network is, the tougher it is for ISPs to differentiate between data.

However, given the tendency of online economies to monopolize the market, the same is not possible. Hence it is necessary to draft laws with these concerns in mind.

10. There were two primary economic issues: *first*, the tendency of the online economy to monopolize, which meant that competition had to be engendered, and *second*, optimum performance, safety, security and user management techniques.

11. He discussed the combined effect of network and bandwagon effects, economies of scale and aggregation leading to an enormous concentration of web users on some webpages. Hence, even though there are many web sites on the internet, the traffic is confined only to a few websites. He gives the example of India where Google was predominantly used as a search engine. Mr. Bailey explained that this was the paradox of the internet, where even though many sites exist; the concentration of traffic is monopolized by a few.

12. He explained how Zero-rating is a distortion of the internet network. Allowing for Zero-rating allows big companies to collect user data. These function like centralized banks of user data. More importantly, he said that Government services will be forced to ride on such platforms. The privacy protection in India is bad and use of such platforms can lead to misappropriation of user data.

13. He then elaborated as to how ISPs have the ability to expand monopolies by collecting and selling user data and locking small players out. Mr. Bailey connected this to greater privacy concerns as ISPs are the only ways to connect to the net. He gave the example of Verizon, which was using startup cookies to collect information. AT&T too tracks user behavior. However, to opt out the user has to pay $50 for a $9 service.

14. He also said that ISPs can hijack search queries and redirect users to engines of their own choice. This has been done without consent or opt-outs. He further elaborated that all collection of info should be based on certain principles like transparency and choice. Even in developed countries, the knowledge about data collection is very low. The contracts which are given by the ISPs are very ambiguous. The links between ISPs and surveillance agencies, and programs such as PRISM, means that it becomes

prudent to check our usage. He went on to conclude by observing that overseeing and regulating ISPs was a must.

15. Ms. **Smarika Kumar** explained that there is a need to look at Net Neutrality from a rights-based perspective, and not just a commercial perspective. She talked about how privacy is embedded in the way users communicate on the internet. Many minorities can use the internet as a platform for expression. They are able to disclose sexualities and they don't have to bring it back to the real world. On the internet, unlike the real world, one is not tagged by their identity and hence different identities can be assumed. However, data collection tags identities. Hence, the sanctity of the private space is violated.

16. She said that the diversity of content and platforms helps privacy. She went on to explain that there are two approaches to preserve this diversity: the first being the competition approach, and the second being the idea that diversity is different from competition. Both have been used in Indian cases such as *Bennett Coleman*.

17. However, diversity has to be seen from the speaker's point of view as well. *Bennett Coleman* talks about how competition and lack of regulation would allow the speech to find its own space. This is the market's point of view, from the speaker's point of view and not from the reader's point of view. According to her, both approaches have merits and drawbacks. She linked it to Net Neutrality and privacy. She explained how preserving diversity is important to preserve privacy in different context of speech of the net. Diversity has to be looked at either from the two points of views *viz*., the speaker, or the user.

18. She concluded by asserting that it is important to develop a critique of Net Neutrality as a concept. It is important to look at the leaders of over the top business models. Even before cartelization, big data was being collated together. Net Neutrality is not just about ISPs' abuse of power but also over the top content providers' abuse of power and preservation of diversity.

19. Mr. Seetharaman asked about passing of packets and about user to user protection, since the responsibility of privacy was passed to someone else. He then asked from a start-up perspective, specifically about how a startup could safeguard itself from monopolies.

20. Mr. Jonnalagadda answered that as a start-up, the access to market is defined by content providers. The definition of 'the edge' is outmoded, as the varying notions of private and public networks. From two edges (user-to-user), we have to evolve to dealing with questions of intermediaries – a user's HTTP node only goes to the intermediary, after which new protocols have to be employed for ensuring protection at that point, going into a repetition of the process on that end.

21. Mr. Seetharaman's next question was about the marketplace of ideas. He wondered as to who should be allowed to regulate Internet given that it is a global entity.

22. Mr. Jonnalagadda responded by stating that the Internet can be regulated within jurisdictions. The OTP and USPs are being regulated. Even if there is no extra regulation, there is national regulation. Hence, even though the Internet is global, there is regulation.

23. Mr. Bailey said that privacy protections are costlier for the companies. There is a need to regulate such practices. Ms. Srinivasan added that one way of doing this was limiting wire-tapping. In India it was harder to know about privacy violations. Our ISPs needs to have monitoring network connected to central monitor data. The telecom companies are supplying info to the Government and regulatory framework is needed to limit this.

24. Mr. Pranesh Prakash asked Ms. Srinivasan if the Indian Telecom Act was sufficient to ensure privacy of the users. She replied that it is one of the ways of regulation. However, it is not the best or the most comprehensive way for the same. The Act has a very loose framework. Net Neutrality has some overlaps for preserving privacy. The laws are drafted in a manner which allows the Government to collect more user data.

25. A question was then asked regarding the strategies that a start-up could adopt to compete with the established players. Mr. Jonnalagadda replied that paying for one's own service was cheaper in cases of constant demand. However to scale up or down, it was more economical to use information provided by the big companies.

26. Mr. Shiva Santosh questioned the exact form of Net Neutrality which the government could implement. Ms. Kumar answered

that an exact form of regulation is not possible. Net Neutrality is not the form of regulation to go for. There are six principles which require protection. This protection is beyond Net Neutrality. They are: 1) Consumers are entitled to access whatever lawful internet content they want; 2) Consumers are entitled to run whatever applications and services they want, subject to the needs of law enforcement.; 3) Consumers can connect to networks whatever legal devices they want, so long as they do not harm them; 4) Consumers are entitled to competition between networks, applications, services and content providers; 5) Service providers are not allowed to discriminate between applications, services and content outside of reasonable network management; 6) Service providers must be transparent about the network management practices they use.

27. She also said that the regulations had to go beyond government; there could be social regulations as well. Ms. Srinivasan said that technology can be used to block freedom of speech as it has been done in China via the Great Firewall which also blocks certain services. Just because it can be done does not mean that it should be done, as the subjectivity of this will bring a plethora of problems.

Session III: International Comparatives – Legal Frameworks in other Jurisdictions

Moderator: Mr. Ramanjit Singh Chima, Asia Consultant, Access Now.

Panelists:

1. Mr. Chaitanya Ramachandran, Associate, Amarchand & Mangaldas & Suresh A. Shroff & Co.
2. Ms. Vidushi Marda, Programme Officer, Centre for Internet and Society.
3. Student Speaker: Mr. Janardhan Pashupati, II Year B.A., LL.B. (Hons.), NLSIU.

    1. **Mr. Ramachandran** was the first speaker of the session. He dealt with the legal position in USA and Brazil. He began by delineating the reasons behind choosing these two jurisdictions. In his opinion, USA has a long history of regulations in this regard and the similarities of Indian administrative framework with that of USA meant that we could learn a lot from them. With respect to Brazil, he admitted that the framework there was quite different as it was a civil law country. Nonetheless, the similarity in development stages and challenges faced made it a good study.

    2. Beginning with the USA, he stated that the market characteristics in USA are quite different due to the well-developed network, which was a monopoly to begin with. Another difference between India and USA is with respect to the triple play model which sees big ISPs competing in voice, data and video, as all of them come bundled together. The regulatory framework in the USA is governed by the Communications Act of 1934 and 1996. The first regulation that dealt exclusively with Net Neutrality was the Open Internet Order ("OIO") introduced by the Federal Communications Commission in 2010. The genesis of the OIO lies in an earlier FCC policy statement where a consumer protection argument was given for having an open Internet. It identified four broad rights that need to be protected viz. allowing consumers to access lawful content of their choice, run applications of their choice, connect legal devices of their choice, and

their entitlement to competitive markets. Consequently, it can be said that the policy statement wanted to take care of application innovation on the content side and network use on the consumer side.

3. Moving on about the OIO, Mr. Ramachandran spoke about the distinction that it sought to create between wired and wireless networks and the three rules contained therein. The *first* rule is a simple fundamental rule that states that there will be no blocking. There seems to be a broad consensus over this rule. The *second* rule postulates that there will be no unreasonable discrimination subject to network management issues such as speed, price, and quality of service *et al*. The exception to this rule provides parameters to judge the reasonability of the discrimination. These include transparency, degree of end-user control, use/ application agnosticism and compliance with industry standard and practices. The *third* and the final rule mandates transparency in disclosing network management practices, in performance characteristics and in their commercial terms including fees for early termination, privacy policy etc. However, In *Verizon Communications, Inc*. v. *FCC*[1], the Court of Appeals for the D.C. Circuit partially struck down the order by holding that the clauses prohibiting blocking and unreasonable discrimination were invalid. However, as Mr. Ramachandran pointed out, the same was merely due to the fact that the FCC had failed to classify ISPs as common carriers as required by the 1934 Act and hence, the same could not apply to ISPs. At the same time, the transparency requirement was upheld.

4. Mr. Ramachandran then moved on to describe the situation in USA post the *Verizon* ruling. FCC was quick to classify ISPs as common carriers in the new rules. A group of citizenry was of the opinion that classifying ISPs as common carriers was landmark as it put them on equal footing with public utilities. However, the same was merely symbolic due to the unfavourable ruling. The new rules treated the wired and wireless networks on an equal footing. Three new rules viz. no blocking, no throttling and no paid prioritization along with enhanced transparency rules were put in place. However, in Mr. Ramachandran's opinion, the major contribution of the new policy was the standard

[1] 740 F 3d 623 (DC Cir 2014).

for future conduct initiatives. The drafters had the foresight to acknowledge the possibility of new unforeseen techniques and technologies which could render the current rules inadequate. Accordingly, it was stated that any future contingency would be judged in light of its interference and the disadvantage that it causes to consumers and content providers subject to reasonable network management measures.

5. Next he went on to show the practical relevance of the future conduct guidelines. The guidelines were used this year in judging the zero-rating scheme that was sought to be launched by several companies. FCC came to the conclusion that Zero-rating schemes will have to be judged on a case-to-case basis and it was more likely that paid schemes would fall foul of the law.

6. Moving on to Brazil, Mr. Ramachandran described how it was largely similar to the Indian market in terms of mobile penetration. The governing law in Brazil is the *marco civil da internet* which was signed into a federal law by the president last year. The same was drafted by the Ministry of Justice with inputs from CGI.br. He talked about Article 3 of the law which explicitly talks about a guarantee of network neutrality. Then he moved on to discuss Article 9 in detail. It prescribes rules similar to the USA but according to Mr. Ramachandran, but it is different in one respect. Unlike the USA, it goes back to a utopian situation and tries to judge the present situation accordingly and hence, it is a bit fundamentalist in its approach. The Article states that there should be no blocking, monitoring, filtering or analysis of the data. Further, it specifically provides that free services will have to abide by such conditions too. Again, like the USA, they also provide technical requirements and emergency as exceptions to discrimination and degradation. In Mr. Ramachandran's view, the law in Brazil is in a nascent stage and hence, we need to keep an eye on the debates and developments there in order to learn from them.

7. Coming to the learnings for India, Mr. Ramachandran stated that it is important for us to identify clear bright line rules which would serve as overarching rules for interpretation, blocking, and future conduct along with a clarification on the regulator and the manner of regulation. He also cautioned that it was important to use specific and unambiguous words to prevent

vagueness in the law. Additionally, there is a need to provide guidelines to determine reasonability. With respect to the distinction between wired and wireless networks, he was of the opinion that such a distinction should not exist and even if it does, wireless network providers should be subject to stringent regulations. Lastly, private participation in the provision of internet should not be disallowed but at the same time, adequate safeguards should be in place to protect the interests of users.

8. Ms. Vidushi Marda discussed on the topic of justified network management. Regarding the use of terminology, she distinguished between "reasonable network management" and "justified network management". Under the former, the practices of an entity are tested against the practices of other entities, for e.g. the practices of Vodafone are compared to those followed by Airtel. However, under the latter, an entity's practices are tested against standards set for the entire industry. Ms. Marda preferred the use of the latter terminology.

9. Ms. Marda admitted that Net Neutrality could not be a black and white issue, since some degree of control in the form of blocking, throttling or termination fees was inevitable and in some cases, desirable. Therefore, it must be tested whether this is a harm arising out of such practices. By way of example, she said that while blocking of the SNTP port was not considered harmful, the blocking of Port 80 was considered so. In order to determine the undesirability of network management practices, she gave three approaches.

10. The *first* approach, espoused by Mr. Christopher Yoo, argues against regulation on an ex-ante basis. The primary argument under this approach is that since regulators are unsure of the harm, they might end up regulating against the good along with the bad. This approach advocates that as long as the consequences of a particular practice are not irreversible, they must be judged on a case-by-case basis.

11. The *second* approach, put forth by Barbara Van Schewick, argues against the case-by-case approach, since there will be no guidance to the entities as to whether what they are doing is right or wrongful. She advocates that a list of purposes for which control practices are permitted should be compiled. Therefore, you can undertake discrimination only if it is application agnostic

and for furthering innovation, but you cannot discriminate on the basis of personal preferences. While she presents a much more nuanced approach to the issue of Net Neutrality, the list provided by her is not exhaustive and not very clear.

12. The *third* approach, as espoused by Mathew Principle, argues that since we do not know the undesirable outcome that is likely to arise out of such practices, we should desist from framing rules and instead, should confine ourselves to standards. This would prevent people from exploiting loopholes in rules and getting past them. A standard is identified and every action is tested against that standard.

13. From the foregoing discussion, Ms. Marda concluded that there is no one definition of Net Neutrality and none of the approaches has sufficient consensus to be considered the dominant approach. She then went on to discuss the legislation governing Net Neutrality in Slovenia, Netherlands, Brazil, United States and Chile. She concluded her presentation with certain guidelines that can be followed for justified network management, broadly modeled on Article 14 of the Indian Constitution. Ms. Marda said that as a general rule, discrimination in the Internet space should be avoided. However, where it is not possible to do so, discrimination must be based on "intelligible differentia", bearing a "rational nexus" with an aim, which should be "legitimate" such as ensuring the security, stability and technical viability of the network. She further stated that in the case of provision of specialized services like Skype, such provisions should not harm normal Internet usage and must only be available on request.

14. Mr. Janardhan Pashupati primarily dealt with the idea of Zero-rating and its treatment in multiple jurisdictions, with a special focus on Chile. Every unique country, he pointed out, has its own unique circumstances, environment, history, industry and patterns of usage, which influence the need, and the kind of regulation it adopts.

15. His central argument dealt with analysing the different price sensitivities of consumers in developing countries. Chile, he mentioned, is central to this comparison, for it shares an economic and social environment similar to that of India, and because of its recent legislations. Being one of the first proponents of Net Neutrality, Chile amended their Telecommunication Act to

prohibit ISPs from interfering, discriminating or hindering the content, applications or services, with the exceptions of situations which relate to privacy of users, protection from viruses and network security. This, in essence, creates a situation in which access to content is unhindered, and no discrimination based on source or type takes place, and any unauthorized throttling or blocking of data is prevented.

16. The intricacies of the system and its approaches are highlighted by showing the interconnected treatment of competition issues and Net Neutrality and by putting them under the regulation of the same body i.e. Subtel. The functional authority and jurisdictional sphere of Subtel, vis-à-vis the government, is described by the demarcation between legislative and the enforcement functions, which are handled by the legislature and Subtel, respectively. At the same time, the government of Brazil has restrained itself to ensure that it does not become overtly paternalistic, by allowing for controlled and consensual provision of zero-rated services.

17. The Chilean government, according to him, is being extremely cautious to not repeat past mistakes, and to avoid a situation similar to that in other sectors like media and telecom in the country; which are heavily monopolistic, with 95% of all print titles being held by two media houses, El Muricuro and Copesa, and 60% of radio stations being owned by a single Spanish group, Prisa. Chile is reeling under the remnants of a system established under a crony dictatorship, which furthered vested interests and private loot. This essentially means that the Internet is the one free media space where any Chilean can work, consume and produce without fear of persecution, heavy entry barriers and high costs, making it an optimal tool of social change in a low income country dependent upon agriculture, fishing and tourism. Subtel is also taking steps to boost fibre-optic connectivity to eliminate the asymmetries between fixed and mobile networks. Other initiatives of the government include mandatory billing per second for voice, and per-kilobyte for all data uniformly, which in effect restricts the ability of the ISP to enter into Zero-rating arrangements with content providers.

18. The result of these prescriptive legislations can be witnessed in the transformative effects on the economy and the society,

which has seen an explosive growth of 49.2% in Internet penetration, reaching a penetration of 22.8 connections per 100 inhabitants. There has also been a significant growth in mobile navigation, which represents 76.6% of 3G connections as of December 2012. These steps have allowed Chile to advance quickly, and reach a level of penetration of 50%, which is at par with that in the OECD countries, rising exponentially from the earlier figure of 37%. The mobile phone market as well, has seen a steady growth of both subscribers and traffic, whereas fixed phones have fallen in stock and traffic.

19. Unlike what was theorized earlier, Mr. Pashupati pointed that Net Neutrality laws are actually helping more people connect to a wider range of the Internet. The aim of universal access has not been abandoned. New and innovative products are and can be developed by new players in the internet markets that are better suited to cater to the needs of the consumer population in their local conditions leading to a situation of shared wealth. Therefore, creating an unequal playing field will hamper this environment of innovation. This, as per him, is a unique opportunity for India, which should learn from Chile's experience to ensure greater access to further the cause of democracy, nurture innovation to help alleviate the challenges of poverty, and guide the nascent Internet sector in India.

20. Mr. Ramachandran provided an example of an Internet provider throttling during primetime hour and thereby, adversely impacting Netflix. He asked whether such a facially application agnostic measure could in effect discriminate against a particular application. Mr. **Ramanjit Singh Cheema** added to this point, asking how one could deal with such discrimination in effect. Ms. Marda said that an unjustified discrimination in effect against a particular application could be avoided by user control prioritization and greater transparency in operations. Mr. Pranesh Prakash added that such discrimination in effect may not be undesirable as long as it is done for a legitimate purpose.

21. The panel was posed a question regarding two methods of regulation - the Chilean model of combining both competition and information technology aspects under one body and the TRAI model of having two different regulators for competition and information technology matters respectively. Mr.

Ramachandran said that as per Section 11 of the TRAI Act, the body has regulatory powers when it came to interconnection and recommendatory powers in all other matters. Therefore, it can refer a matter to the Competition Commission of India if it considers it appropriate. Mr. Ranjan Mathews raised a criticism of the Indian TRAI model, whereby TRAI only has regulatory powers while the Department of Telecom has the power to frame policies. He was concerned about the effectiveness of such policy-regulatory dichotomy.

22. Another question was concerned with whether the policy of treating similar data similarly is in consonance with application agnosticism and the general conception of Net Neutrality. Mr. Ramachandran answered that there was no inherent problem in treating different classes of content differently. In fact, he stated that the certain real time services like Skype need to be treated differently from asynchronous content like emails. It would become an issue only if it started disadvantaging certain kinds of services. Ms. Marda said that as long as the conditions of intelligible differentia, rational nexus and legitimate aim are complied with, there is no real conflict with the principles of Net Neutrality.

Session IV: Legal Framework in India and the way Forward

Moderator: Ms. Nirupama Jayasimha, Associate, Trilegal.

Panelists:

1. Mr. Pranesh Prakash, Policy Director, Centre for Internet and Society.
2. Mr. Rajan S. Mathews, Director General, Cellular Operations Association of India.
3. Mr. Ramanjit Singh Chima, Asia Consultant, Access Now.
4. Mr. Ganesh Prasad, Partner, Khaitan & Co.
5. Student Speaker: Mr. Pushkal Dubey, III Year B.A., LL.B. (Hons.), NLSIU.

    1. Mr. **Rajan S. Mathews** explained that the Indian network operators are in favour of Net Neutrality. He advocated for a simple definition of Net Neutrality which is specific to Indian context and must be able to account future innovations. Additionally, he emphasised that Net Neutrality must be understood in the context of public policy and must take into account the 1 billion people who do not have broadband connections.

    2. Mr. Rajan then explained the five major networks around the world *viz.*, landline network, mobile network, cable network, satellite network and private network. In India, the principle network is the mobile network, but there are licensing requirements in this sector. At present, the average speed of connections in India is very poor and the onus to invest and improve the same has been placed upon the networks operators. Mr. Rajan said that the definition of Net Neutrality must take into account these obligations of the operators.

    3. Mr. Rajan, then shifted his focus to the OTT players. He pointed that the OTT players and network operators have a symbiotic relationship. The network operators support the principle of 'same service same rule' for the OTT services. This means that players providing the same services are to be governed by the same rules.

    4. He said that the debate on Net Neutrality in India should focus net quality and net equality. Further, the OTT companies must

also start taking responsibility for the externalities. If they do harm, they must gather costs. There is a difference in the obligations of the OTT players and the network operators. For instance, the operators have to pay 15% of their revenue (if they provide the voice over internet service) to the government and also pay a service tax of 13.5%. OTT players have no such commitments. The operators have to ensure quality service. He explained this with an example, that if Facebook goes down, they don't have an obligation to come back within an hour or 2 hours. However, the operators have to provide 99.999% up time networks and services, failing which they are penalized. He concluded by saying that if the OTT players aren't regulated, then the government can reduce the regulatory burden for operators as well

5. Mr. **Ramanjit Singh Chima** emphasized the importance of protecting Net Neutrality not only in theory, but also in practice. In our quest to make the free market function better, a regulatory framework that effectively regulates modern network management systems and ensures fidelity towards it is needed. Mr. Chima ruled out the possibility of strictly applying competition law or anti-trust law to deal with the Net Neutrality issue as it prevents any form of vertical integration. The need to view Net Neutrality as a part of a larger telecommunications idea and not just as an anti-trust idea was thus stressed upon.

6. While advocating for an open Internet space, he noted how the internet, as an open dynamic medium, makes it easier for innovations to find an easy way through the web. The prospect of treating telecom operators as common carriers and subjecting them to regulation to prevent them from deciding what categories of a service the consumer should get on payment for a certain service was put forward as well. In this regard, the clauses that provide for unrestricted access to the Internet by the subscriber and the power of the TRAI to issue binding regulations with respect to the quality of services etc. under Section 11B of the Telecom Regulatory Authority Act, 1997 were cited.

7. Further, the Federal Communications Commission in the USA was used to illustrate the kind of independent regulatory agency that is needed to deal with the Net Neutrality issue. An immediate solution was to bring in some clarity in the DoT license framework about what activities are permissible and what

aren't, and the powers of the TRAI as an independent regulator. Lastly, the issue of OTT services was also dealt with wherein he opined that VoIP providers are not the same as network providers and should therefore be subject to different regulations. He concluded his comments while stressing on the need to regulate common carriers and accommodating the concept of an open Internet in the regulatory mechanism.

8. The next speaker, Mr. **Pushkal Dubey** was also in support of having a regulatory framework in place. He suggested that the regulatory framework must adequately take into account the interest of several stakeholders by protecting the consumers' choice, providing scope for innovation to content providers and at the same time, not creating any disincentive for the telecom service providers.

9. The issues that have surfaced with respect to data discrimination, including paid prioritization and Zero-rating of services, were discussed thereafter. He noted how paid prioritization is a consequence of congestion on the Internet. The fact that paid prioritization allows ISPs, who do not even form a part of the market; to affect competition in the market through stifling of data transmission was highlighted. Further, it disincentivizes the ISPs to take up the expansion of the market. The privacy concerns that paid prioritization raises were also brought into the realm of discussion.

10. Another important facet of the debate that he dealt with was Zero-rating of services like the Airtel Zero, wherein the content providers pay the ISPs to enable free use of their services by the subscribers. While this model seems to be beneficial to all parties in allowing ISPs to maximize profits by bringing in a larger number of applications, allowing consumers to abstain from using data and enabling greater outreach for the content providers, it doesn't explain how the content providers would get enough money to make their services available on the Zero-rating platform. It was argued that these Zero-rating services do not necessarily stifle competition due to the different ways in which consumers behave. In this regard, he brought out how the class of consumers that is presently accustomed to accessing all the data on the Internet remains unaffected through such services, as they would continue to pay for the content not available on such a platform. He then discussed how the

Zero-rating model is also beneficial for the class of consumers that use the Internet for specific purposes, by actually augmenting the already existing allocation of resources directed towards the access of such services. The major requirement of regulating any exclusivity in services brought onto the Zero-rating platform to ensure efficacy of other measures was also brought out.

11. Lastly, emphasizing the need for adopting a fair regulatory mechanism to prevent anti-competitive practices, the concept of exempting niche startups from the exorbitant fixed costs of getting listed on a Zero-rating platform and using a percentage of the revenues as a measure was suggested so as to adequately provide for and protect any innovation.

12. Mr. **Ganesh Prasad** began with pointing out that the real issue being debated here is not differential bandwidth cost, but unfettered access for all and no undue preferences to the companies. He said that it was not possible to treat all traffic on the Internet in an equal manner, as real time services cannot be delivered unless the service provider networks are configured to prioritize these packets against conventional packets for immediate delivery. He conceded that the prioritization of some packets will result in slowing down of others, but this issue can be solved if we increase data network capacity significantly. He pointed that the operators need most spectrum to use 3G and 4G. Spectrum cannot be manufactured and they have to migrate the existing 2G network used by GSM to 3G and 4G.

13. Mr. Prasad was in favour of treating all content providers' paid content equally. However, consumer demanded traffic could be given preference. If they are paying, then there is no harm is providing them what they demand. He then addressed the question of whether bandwidth charges of the content providers should be at the same rate. He said that this was not necessary. Telecom service providers should be allowed to charge different rates for different service packets similar to a vegetable vendor's volume based discount.

14. He said that he was in favour of service providers profiteering from bandwidth sale. He justified his response by giving the example of roads. One does not pay for usage of roads as it is built on taxpayers' money, but we do pay for its maintenance. There are different rates for different kinds of vehicles. However, Internet is not built with taxpayers' money and still

the government collects revenue from it, be it spectrum auction, usage charges, license fees or even the corruption money. In such a situation, it will not be wrong to allow the telecom service providers the right of reasonable profit. He reiterated that the real issue here should not be differential bandwidth costs but unfettered access and ensuring that no undue preference is given to big companies. He concluded by saying that protection of consumer interest should be the ultimate goal.

15. Mr. **Pranesh Prakash** started by reasoning out the need to regulate the telecom sector. He said that it is all about networks and if they collude, it will lead to an anti-competitive atmosphere prejudicing the consumers. The purpose of a regulator is threefold: to prevent long-term detriment to consumers, to provide universal and affordable access, and to ensure and promote access and prevent harm.

16. Net Neutrality debates are the symptoms and not the root cause. The real issue is who should pay how much in transmitting data on Internet. Internet Service Providers and Telecom Service Providers are gatekeepers as they are the exclusive route to all the consumers. There is no multiplicity of routes available. However, in the Zero-rating there are multiple routes available which we fail to see. This failure leads to our ignorance due to which we do not feel like regulating them. Therefore, the global opinion is that the gatekeepers should not discriminate against content and the regulation should address this.

17. He further clarified that regulatory models differ across the globe. The lack of Net Neutrality covers issues such as freedom of speech and expression, privacy, association etc. Harm to competition leads to decreased incentive for innovation at the content provider level. There is always a cost to start up an e-commerce venture or an enterprise on the Internet. There are concerns of innovation of the ISP models and these are to be considered as well. We need to understand and appreciate that innovation is at multiple levels. People who are against the Net Neutrality principle take this stance because it harms innovation at the networking layer.

18. He said that even a closed network has its value but Internet has its value attached due to its openness. Though it is believed that Internet is governed by the end to end principle, it is merely a design principle and does not surmise the way it functions.

The goal of Net Neutrality should be consumer welfare, which is ideal in a situation when we have better interconnection in markets, but these multilateral agreements are dispensed with by the companies due to the cost involved. This agreement helps these companies in gaining domination in the market. This was illustrated in the context of Comcast-Netflix deal, which did away with the intermediaries that played the role of forming an interconnected network. Every change in the use of 2G, 3G, and 4G usage by the consumers will affect the shape and form of the regulation. Therefore, it needs constant revision. In the end he said that fewer regulations will lead to better realization of the goal of Net Neutrality.

19. During the Q&A session, Mr. Amlan Mohanty asked whether the Cellular Operator Association of India was in favour of a law on Net Neutrality and their stand on Zero-rating. Mr. Mathews replied by stating that the rules and guidelines were already existing under which Net Neutrality could be enforced and a law on the subject had to account for political dynamics. Mr. Chima followed up by stating that the Zero-rating policy is not outside the ambit of Net Neutrality.

20. The next question was posed by Mr. Divij Joshi. He asked about the potential impact of ISPs over the government considering their status as the gatekeepers of the Internet. Mr. Mathews clarified that there are multiple gatekeepers of Internet. He further stated that there is an issue of intermediary liability and there are several guidelines which have to be complied with by the telecom operators as well as the OTT service providers.

21. Mr. Aradhya Sethia questioned the credibility of the argument, which Airtel provides about the Zero-rating policy that the content providers for Zero-rating plan have to pay more than the required amount. Mr. Mathews replied that both internet.org and Airtel Zero invited applications at zero cost. However, if they enterd into anti-competitive agreements, then the penalty is as high as 50 crores.

22. Mr. Prakash was asked a question regarding the impact of open spectrum of Net Neutrality and the kind of innovation needed. He responded that the innovation is not related to network technology but interconnection. The requirement is of information regarding who pays whom and how much. Extracting

this information has become extremely complex and the entire sphere is network economics.

23. The final question was posed by Ms. Sharada. She asked if there was an ideal policy approach that could help in implementing Net Neutrality in India. Mr. Chima responded by saying that an immediate solution lies in the DoT licensing framework and TRAI licensing framework. The long term fix lies in the legislation on communication laws. Mr. Ganesh Prasad responded by stating that it is premature to have a blanket Net Neutrality regulation. Mr. Prakash responded by questioning whether the present political climate is in favour of Net Neutrality. However, he favoured the issue of positive discrimination on the basis of various business models. The actual regulation should neither be in the form of rules nor regulations and should be reviewed every two years.