

Concept note

I. Executive summary

This concept note is intended as a comprehensive support document to our comments on the Consultation paper. After examining net-neutrality in the Indian context, the concept note outlines two distinct academic research papers – the first concerns an economic model aimed at addressing the question of incentives for ISPs to expand their infrastructural capacities in the absence of net-neutrality, and the second focuses on whether legislative or regulatory action is need to limit the ability of TSPs/ISPs to interfere with OTT content that is transmitted over their networks. Following this, the concept note argues in favor of incorporating an “application-agnostic” rule into regulatory frameworks surrounding net-neutrality. A few existing foreign legislations that impart legal force to the principles of net-neutrality are examined next, namely legislations from Chile, Netherlands, Slovenia, Brazil and the United States of America. The concept note then summarizes two relevant judgments by the Supreme Court of India, where the Court discusses the idea of spectrum as a natural resource and the State's obligation to envision non-discriminatory methods for their distribution and alienation. Lastly, zero-rated service platforms are examined from a competition law perspective.

II. Net-neutrality in the Indian context

The Internet offers a lot of potential and opportunities for sustainable development.¹ Research shows that access to Internet provides individuals and firms a vital resource that facilitates innovation, learning and efficiency, all of which lead to greater productivity and thus, greater economic growth. The positive impacts associated with the Internet are possible because of the neutral nature of the Internet. If NN was done away with, TSPs would begin to charge users different prices for access to different content, such as music, videos, e-mail, chat etc., each of which requires a different amount of bandwidth. Lower-income internet users, SMEs and start ups would be excluded from parts of the Internet, while higher income users and large companies would have continued access to all internet content. The economic benefits would be concentrated in the

¹ Haiyan Qian, Director of Division for Public Administration and Development Management of the UN Department of Economics and Social Affairs, UN News Services 2012

hands of rich individuals and established firms who can afford more expensive content. Start ups and SMEs who will no longer be able to leverage the full benefits of the internet would find it even more difficult to compete with established firms.

Why Net-neutrality is good for the Indian Economy- A neutral internet offers a global platform to everyone to access information, products and services stimulates fair competition and innovation. There will be equal access to the internet for small and medium enterprises and start ups. Net-neutrality stimulates consumer choice, without having TSPs make these choices for them. At a time when India is making efforts to encourage ICTs, undermining net-neutrality would lead to the creation of new barriers to the online marketplace.

A two-tiered Internet will carry negative consequences for content providers and other start up businesses on the Internet. Companies that cannot pay an extra fees to telecom operators to ensure rapid access to their pages run the risk of losing markets, local businesses could end up being completely excluded from the global marketplace. A non-neutral internet will lead to the inclusion of rich content providers and exclusion of others. Innovation would be stifled making the Internet a privilege for those who can afford it.

There is a demand for “fast lane” internet in certain sectors; this enables content providers to ensure priority delivery of their content. Tele-medicine is one such example.

The miracle of the Internet is that it allows individuals to be connected on a global platform, irrespective of their location. But if TSPs were to divide their networks into fast lanes and slow lanes, the simple nature of the internet would go through a severe change. In order to have a global audience and offer satisfactory services, content providers may have to negotiate with thousands of TSPs throughout the world, ultimately locking out smaller companies that do not have the means to afford fee imposed by TSPs. On the other hand, TSPs will have profit incentives to charge their competitors heavily to access fast lanes. Another issue with a two-tiered internet is that TSPs could be tempted to make slow lanes slower intentionally in order to encourage companies to move to fast lanes.

In the tele-medicine context, tele-health and electronic record data exchange are the two primary areas of health care that would suffer if TSPs are allowed to charge higher prices for faster transmission speeds. Having to pay more for priority data access could reduce information sharing in health care and lock small innovative health care start ups out of the market.

The e-Governance initiative of Govt. of India is totally based on ICT which has the potential to offer citizen centric services. The application of e-governance in health care can monitor and improve the quality of health care services, make the system efficient, transparent and cost effective as it will bring healthcare providers, policy makers, professionals and the public on a common platform. Government of India has launched Village Resource Centers (VRCs) using communication and remote sensing satellite provided by Indian Space Research Organisation (ISRO) to give essential and intelligent services to 600,000 villages. The villagers will get information on agriculture, health, education, natural resources through VRCs.² All of these programs presume an internet built with net neutrality. However, if health care was to be given prioritized access, the “fast lane” costs would be imposed on either patients or the doctors providing access. On the other hand, slow lanes will ensure that poor patients will not be able to have access to certain services, for the reason that their doctors do not have the budget to afford the fast lane

CAPs that earn by advertising and other business models should be charged. CAPs are the strongest advocates for NN. If a particular TSP were to threaten to charge a Google or Amazon, they could withdraw the service from that TSP. The loss of this service could result in possible loss of clients for the TSP to other TSPs that have access to these services. While the CAP may lose access to the TSP’s subscriber base, however, the largest CAPs are now so big and have such a diverse set of users internationally that such a move would have little impact on their overall revenue. This argument is strongest when there is a vibrantly competitive retail broadband market.

There are two primary faults in this approach – It fails to take into account local businesses, start ups and SMEs who will loose out on potential market space as a result of failure to pay TSPs for priority access. Secondly, it must be noted that content providers are in a weaker position than TSPs. There are plenty of content providers available to end-users to chose from, so if a TSP blocks access to one content provider's service, substitute services would quickly fill up that space. However, considering the significantly lesser number of TSPs available to choose from, shifting to another TSP altogether is seldom done by customers.

Over and above the arguments made above, net-neutrality is particularly important in the Indian context for several reasons:

1. The rate of internet penetration is still quite low in India, therefore priority should be providing access for all citizens but the quality of access cannot be compromised in favor of

² Available at: <http://telemedindia.org/egov.html>

arguments like "some access is better than no access".. However, it is equally important that access be given to a neutral internet, so that increased broadband penetration continues to lead to higher GDP growth. A two-tiered market will slow this process.

2. Prioritization of information on technical factors such as speed will also affect information flow.
3. Services like VoIP offer new technologies at accessible costs and have immediate applications for improving services that will directly help bridge the digital divide as they improve communications. Establishment of such services will be severely limited if net neutrality is not explicitly protected in India.

III. Reports and studies

*"The Debate on Net Neutrality: A Policy Perspective"*³ is a study carried out in 2009 by the Warrington College of Business Administration at the University of Florida and Mendoza College of Business at the University of Notre Dame. In the back drop of proposals by broadband providers in the US demanding fees from websites for preferential access to end-users, while arguing that they have put resources to maintain and upgrade the physical infrastructure to provide services to consumers while the popular web sites have thus far gotten a 'free ride' on their resource, the research develops a game-theoretic model to address the question of incentives for ISPs to expand their capacity without net neutrality. While taking both neutral and a non-neutral regime into consideration, the study makes the following propositions:

1. Under a non-neutral regime, the gains are not experienced equally. While the monopolist ISP gains if no net-neutrality were in place, the content providers are definitely worse off. Consumer surplus does not change or is higher in the short-term, and in the latter case, while a majority of consumers are better off, a minority is left worse off with larger wait time to access their preferred content.
2. ISPs invest in broadband infrastructure to reach the socially optimal level under net neutrality, but when there is no net neutrality, the ISPs either under-or-over invests in infrastructure.
3. There are a number of problems with the assertion that charging content providers would

3 H K Cheng, S Bandyopadhyay and H Guo, *The Debate on Net Neutrality: A Policy Perspective*, available at: <https://net.educause.edu/ir/library/pdf/CSD4854.pdf>

increase network investment, in particular (source):

- i. Charging content and application providers may reduce innovation and investment in such applications, which are the driver of demand for enhanced network access.
- ii. Development of premium data services could incentivize network operators to ensure capacity remains scarce, which may in turn reduce network investment rather than stimulate it.

"Network Neutrality and Quality of Service - What a Non-Discrimination Rule Should Look Like" by Barbara Van Schewick⁴ is a study that focuses on whether legislative or regulatory action is needed to limit the ability of providers of internet access services to interfere with the applications, content and services on their networks. It looks into the implications of a non-discrimination rule and proposes a framework that policy makers and others can choose among different options for network neutrality rules. It attempts to explain how different non-discrimination rules affect network providers' ability to offer quality of service and which forms of QoS, if any, a non-discrimination rule should allow. It makes the following observations:

A. A network neutrality rule should meet the following criteria:

1. It should preserve the factors that have allowed the Internet to serve as a platform for application innovation, free speech and decentralized economic, social, cultural and political interaction in the past:
 - i. User choice: Users independently choose which applications they want to use, without interference from network providers.
 - ii. Innovation without permission: Innovators independently choose which applications they want to pursue; they do not need support or "permission" from network providers in order to realize their ideas for an application.
 - iii. Application Blindness: The network is application blind. An application blind network is unable to distinguish among the applications on the network, and, as a result, is unable to make distinctions among data packets based on this information.
 - iv. Low costs of application innovation: The costs of application innovation are low. It should not constrain the evolution of the network more than is necessary to reach the

⁴ B V Schewick, *Network Neutrality and Quality of Service – What a Non-Discrimination Rule Should Look Like*, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1684677

goals of network neutrality regulation.

2. It should make it easy to determine which behavior is and is not allowed to provide much needed certainty for industry participants.
 3. It should keep the costs of regulation low.
- B. The application-agnostic discrimination approach strikes the best balance between social benefits and social costs: The paper shows that any measure that singles out an application or class of applications for differential treatments tilts the playing field against some applications or classes of applications and interferes with users' decisions about how to use the network, creating significant social costs. At the same, network providers can usually realize their legitimate goals using application-agnostic means that are not similarly harmful to application innovation, user choice, or the Internet's ability to reach its social, cultural or political potential.
- C. By legitimizing a broad range of discriminatory conduct (that is, all conduct that is application-agnostic), the rule gives network providers great flexibility to realize legitimate goals such as congestion management, price discrimination, or product differentiation, albeit through means that do not interfere with the values that net-neutrality rules are designed to protect. For example, during times of congestion, a network provider could give one person a larger share of the available bandwidth than another, for example because this person pays more for Internet access or has used the Internet less over a certain period of time. But it could not throttle the bandwidth available to a specific online video application.
- D. Application-agnostic network management coupled with user controlled prioritization gives network providers the tools they need to maintain the quality of the Internet experience for all users, even during times of congestion, while preserving the application-blindness of the network and the principle of user choice to the extent possible. Network providers would be able to prevent aggressive users from overwhelming the network and enforce fairness among users by allocating bandwidth among users in application-agnostic ways. But how users use the bandwidth available to them, and whether they would like to give some of their applications priority over others, would be choices left to the users. At the same time, the reasonable network management exception provides a safety valve that allows network providers to react in more application-specific ways if a problem cannot be solved through

application-agnostic means. The proposed rule allows network providers to offer certain (though not all) forms of Quality of Service. In particular, it allows network providers to offer different classes of service, if (1) the different classes of service are offered equally to all applications and classes of applications; (2) the user is able to choose whether and when to use which class of service; and (3) the network provider is allowed to charge only its own Internet service customers for the use of the different classes of service.

In her paper titled “*Network Neutrality: What a Non-discrimination Rule Should Look Like*”⁵ Barbara van Schewick differentiates between two types of non-discrimination rules, one that would ban discrimination that causes harm to users or harm to competition and one that bans all application-specific discrimination. The paper concludes that the non-discrimination rule that bans all application-specific discrimination meets the criteria for a good non-discrimination rule, based on the following observations :

1. It should protect the factors that have fostered application innovation in the past to ensure that the Internet can continue to serve as an engine of innovation and economic growth in the future
2. It should protect the factors that have allowed the Internet to improve democratic discourse and to provide a decentralized environment for social and cultural interactions in which anyone can participate
3. It should not constrain the evolution of the network more than is necessary to reach the goals of network neutrality regulation.
4. It should make it easy to determine which behavior is and is not allowed to provide much-needed certainty for industry participants.
5. It should keep the costs of regulation low.

⁵ *Supra.* 2

IV. Why the application-agnostic rule is ideal for a net-neutrality regime

Protecting the factors that are the core of the Internet's economic, social, cultural and political potential

By prohibiting application-specific discrimination, the proposed non-discrimination rule makes it impossible for network providers to distort competition among applications or classes of applications. The rule provides certainty to application developers and their investors that they will be able to reach users and compete with other applications on the merits, without interference from network providers. It allows users, not network providers to choose how they want to use the network and which applications will be successful. Letting users make this choice not only increases the value of the Internet for users and for society, it is also an important part of the mechanism that enables application-level innovation to function effectively. In addition, maintaining application-blindness and user choice is key to allowing the Internet to realize its social, cultural and political potential.

Network Management

Network providers would be able to enforce fairness among users, allocating bandwidth among users in application-agnostic ways, but how a user decides to use its “share” of bandwidth, both in general and at a particular point in time would be decided by the user. To the extent that applications benefit from relative prioritization at times of congestion, network providers could allow users to choose which applications to prioritize within the user’s bandwidth envelope during times of congestion. As long as the ability to prioritize is offered independently of the specific applications or classes of applications (i.e. not tied or restricted to specific applications or classes of applications) and the choice of which applications to prioritize is left to the user, this form of network management would be consistent with the non-discrimination rule proposed above.

Application-agnostic network management coupled with user-controlled prioritization maintains the quality of the Internet experience for all users, while preserving the application- blindness of the

network and the principle of user choice, with beneficial economic, social, cultural and political consequences. From a technical perspective, application-agnostic network management has the added advantage of removing the incentive for users to masquerade their applications to evade or take advantage of certain application-specific treatment in the network, freeing resources at the network provider and at users.

V. International legislations on net neutrality

Chile

In August 2010, the Republic of Chile became the first nation in the world to incorporate provisions preserving net-neutrality into its books of law. Three new Articles⁶ were added to the General Law of Telecommunications, which imposed the following core obligations and prohibitions on Chilean ISPs:

- ISPs may not arbitrarily block, interfere, discriminate, hinder or restrict the right of any Internet user to use, send, receive, or offer any legal content, application or service through the Internet, or any legal Internet activity or use. Content, applications and services may not be arbitrarily distinguished based on their origin or ownership. This does not preclude ISPs from adopting measures necessary for the purposes of traffic management and network administration within their respective service zones, provided such measures are not likely to affect fair competition.
- ISPs may block access to certain content, applications or services upon the express request of users, at the users' cost. However, under no circumstances will such blocks arbitrarily affect CAPs.
- ISPs may not limit the right of users to use any kind of hardware peripherals on their networks, so long as they are legal and do not damage the network or quality of service.
- ISPs must publish on their websites all information related to Internet access offered, its speed and quality of connection, making distinctions between national and international

⁶ Articles 24H, 24I and 24J, *Ley General de Telecomunicaciones*, available at: <http://www.leychile.cl/Navegar?idNorma=29591>

connections, and shall include information about the nature and guarantees of service.

In addition, the Chilean *Subsecretaria de Telecomunicaciones* (Under-Secretariat of Telecommunications) in May 2014 prohibited zero-rated services as being violative of the principles of net-neutrality.

Netherlands

After Chile, Netherlands in June 2012 became the second nation in the world to accord legislative protection to the principles of net-neutrality. Following widespread reports in 2011 that a handful Dutch ISPs had been engaging in discriminatory blocking of services such as VoIP and instant messaging, Article 7.4a⁷ was added to the Telecommunications Act, whereby ISPs were prohibited from hindering or slowing down services or applications on the Internet. Exceptions to the this rule are allowed only under the following circumstances:

- To reduce congestion, while treating similar traffic equally
- To preserve the integrity and security of the network and service of the ISP, or the equipment of the end-user (if the breach of integrity or security is caused by the equipment of the end-user, the provider has to notify the end-user first and give them sufficient time to rectify the situation)
- To block the transmission of unwanted communications such as spam (only with the prior consent of the end-user)
- To give effect to a legislative provision or a court order

Article 7.4a further stipulates that ISPs may not impose differential charges on end-users for the use of different Internet content, applications and services, serving as an effective prohibition of zero-rated services in the country. Also, future administrative orders can institute minimum quality requirements to prevent the deterioration, hindrance, or slowing down of network communications.

Slovenia

In December 2012, Slovenia incorporated its own legislative provision on net-neutrality into the

⁷ Article 7.4a, *Telecommunicatiewet*, available at: http://wetten.overheid.nl/BWBR0009950/Hoofdstuk7/Artikel74a/geldigheidsdatum_10-02-2014

Slovenian law on electronic communications. Article 203⁸ was added to the Electronic Communications Act, under which the Slovenian Parliament reiterated the nation's commitment to the open and neutral character of the Internet and forbade network operators and ISPs from restricting, delaying or slowing down Internet traffic at the level of individual services or applications and from implementing measures for their devaluation. However, the following instances of departure from this rule are allowed:

- urgent technical measures to ensure the undisturbed operation of networks and services (e.g. to avoid traffic congestion)
- urgent measures to preserve the integrity and security of networks and services (e.g. elimination of unjustified seizure of a transmission medium – channel)
- urgent measures for limiting unsolicited communications
- court orders

In addition, Article 203 says that the services of network operators and ISPs must not be based on the services or applications that are provided or are used over the Internet. In other words, ISPs are prevented from charging subscribers differently on the basis on the services provided over the Internet, constituting another national prohibition on zero-rated services.

Brazil

In April 2014, the Brazilian President signed into law an “Internet Constitution” - *Marco Civil da Internet*⁹ – that seeks to reinforce the protection of civil liberties in the digital age. Net-neutrality, along with freedom of expression and Internet security, form the three major themes of the legislation and it contains several provisions that uphold the principles of net-neutrality. For starters, *Marco Civil* identifies the preservation and guarantee of net-neutrality¹⁰ as one among the eight principles that oversees the discipline of Internet use in Brazil. Preservation of stability, security and functionality of the network¹¹, and freedom of business models promoted on the Internet¹² also find mention amongst said principles.

8 Article 203, *Zakon O Elektronskih Komunikacijah*, available at: <http://www.uradni-list.si/1/content?id=111442>

9 *Marco Civil da Internet*, available at: <https://www.publicknowledge.org/assets/uploads/documents/APPROVED-MARCO-CIVIL-MAY-2014.pdf>

10 *Marco Civil da Internet*, Article 3

11 *Ibid.*

12 *Ibid.*

Marco Civil further stipulates that the party responsible for the transmission, switching or routing has the duty to process, on an isonomic basis, any data packages, regardless of content, origin and destination, service, terminal or application.¹³ Departures from this rule is allowed only after consultations with the Internet Steering Committee and National Telecommunications Agency, in the interests of¹⁴:

- Technical requirements essential to the adequate provision of services and applications
- Prioritization of emergency services

Even when legitimately discarding the principles of net-neutrality under the circumstances mentioned above, service providers are required to:¹⁵

- Abstain from causing damage to users
- Act with proportionality, transparency and isonomy
- Provide transparent, clear and sufficiently descriptive advance-notice to users of the traffic management and mitigation measures adopted, including those related to network security
- Offer services in non-discriminatory commercial conditions and refrain from anti-competitive practice

Lastly, service providers are prohibited to block, monitor, filter or analyze data packets when providing Internet connectivity (free or at a cost) as well as in transmission, routing or switching.¹⁶

United States of America

In the United States, the principles of net neutrality were recognized on a policy level for the first time in 2005, when the FCC adopted a policy statement¹⁷ that established the following four principles of an open Internet:

- Consumers deserve access to the lawful Internet content of their choice.
- Consumers should be allowed to run applications and use services of their choice, subject to

13 *Marco Civil da Internet*, Article 9

14 *Ibid.*

15 *Ibid.*

16 *Supra.* 9

17 Federal Communications Commission, *Policy Statement on Broadband Access*, available at: https://apps.fcc.gov/edocs_public/attachmatch/FCC-05-151A1.pdf

the needs of law enforcement.

- Consumers should be able to connect their choice of legal devices that do not harm the network.
- Consumers deserve to choose their network providers, application and service providers, and content providers of choice

While these principles did recognize the tenets of net neutrality, they remained non-enforceable standards until December 2010, when the FCC approved the Open Internet Order containing three specific rules:

- Transparency - Fixed and mobile broadband providers must disclose the network management practices, performance characteristics, and terms and conditions of their broadband services
- No blocking - Fixed broadband providers may not block lawful content, applications, services, or non-harmful devices; mobile broadband providers may not block lawful websites, or block applications that compete with their voice or video telephony services.
- No unreasonable discrimination - Fixed broadband providers may not unreasonably discriminate in transmitting lawful network traffic.

The Order imposed much more liberal obligations on mobile broadband providers as the FCC felt that technical limitations of wireless Internet necessitated looser regulations when compared to fixed-line broadband providers. The Order nevertheless provided regulatory force to the principles of net neutrality, although several stakeholders expressed disappointment over the fact that it did not go far enough to safeguard net neutrality. However, the Open Internet Order's rules against blocking and unreasonable discrimination were struck down by the United States Court of Appeals for the District of Columbia Circuit in January 2014 in the matter of *Verizon v. FCC*¹⁸, as the Court ruled that the FCC had no authority to enforce Network Neutrality rules, since Internet service providers are not identified as "common carriers".

In response to the Court ruling and after much public debate that involved the President of the United State's recommendation to reclassify Internet service providers as common carriers, the FCC in February 2015 reclassified ISPs as common carriers under Title II of the Communications Act,

¹⁸ *Verizon Communications Inc. v. Federal Communications Commission*, 740 F.3d 623 (D.C. Cir. 2014)

thereby making Section 706 of the Telecommunications Act 1996 applicable to ISPs. Section 706 requires the Federal and State Communications Commissions to encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment. Pursuant to this, the FCC also released a fresh Open Internet Rules and Order in March 2015, which introduced the following “Bright Line Rules” applicable to providers of both fixed and mobile broadband services:

- No Blocking: broadband providers may not block access to legal content, applications, services, or non-harmful devices.
- No Throttling: broadband providers may not impair or degrade lawful Internet traffic on the basis of content, applications, services, or non-harmful devices.
- No Paid Prioritization: broadband providers may not favor some lawful Internet traffic over other lawful traffic in exchange for consideration of any kind—in other words, no "fast lanes." This rule also bans ISPs from prioritizing content and services of their affiliates.

VI. Relevant judgments

Centre for Public Interest Litigation v. Union of India & Ors.¹⁹

When it comes to alienation of scarce natural resources like spectrum etc., it is the burden of State to ensure that a non-discriminatory method is adopted for distribution and alienation, which would necessarily result in protection of national/public interest.

Facts:

Petitioners questioned the grant of UAS Licenses to private respondents by contending that the procedure adopted by the DOT was arbitrary, illegal and in complete violation of Article 14 of the Constitution. The DOT had violated the recommendations by the TRAI that there should be no cap on the number of Access Service Providers in any service area and this was in complete violation of Section 11(1) of the TRAI Act

¹⁹ (2012) 3 SCC 1

Issues:

1. Whether the Government has the right to alienate, transfer or distribute natural resources/national assets otherwise than by following a fair and transparent method consistent with the fundamentals of the equality clause enshrined in the Constitution?
2. Whether the recommendations made by the Telecom Regulatory Authority of India (TRAI) on 28.8.2007 for grant of Unified Access Service License with 2G spectrum in 800, 900 and 1800 MHz at the price fixed in 2001, which were approved by the Department of Telecommunications (DOT), were contrary to the decision taken by the Council of Ministers on 31.10.2003?
3. Whether the exercise undertaken by the DOT from September 2007 to March 2008 for grant of UAS Licenses to the private Respondents in terms of the recommendations made by TRAI is vitiated due to arbitrariness and *mala fide* and is contrary to public interest?
4. Whether the policy of first-come-first-served followed by the DOT for grant of licenses is ultra vires the provisions of Article 14 of the Constitution and whether the said principle was arbitrarily changed by the Minister of Communications and Information Technology (hereinafter referred to as 'the Minister of C&IT'), without consulting TRAI, with a view to favor some of the applicants?
5. Whether the licenses granted to ineligible applicants and those who failed to fulfill the terms and conditions of the license are liable to be quashed?

Held:

The State is empowered to distribute natural resources. However, as they constitute public property/national asset, while distributing natural resources the State is bound to act in consonance with the principles of equality and public trust and ensure that no action is taken which may be detrimental to public interest. Like any other State action, constitutionalism must be reflected at every stage of the distribution of natural resources. In Article 39(b) of the Constitution it has been provided that the ownership and control of the material resources of the community should be so distributed so as to best sub-serve the common good, but no comprehensive legislation has been enacted to generally define natural resources and a framework for their protection. of course, environment laws enacted by Parliament and State Legislatures deal with specific natural resources i.e. forest, air, water, coastal zones, etc.

...The ownership regime relating to natural resources can also be ascertained from international conventions and customary international law, common law and national constitutions. In international law, it rests upon the concept of sovereignty and seeks to respect the principle of permanent sovereignty (of peoples and nations) over (their) natural resources as asserted in the 17th Session of the United Nations General Assembly and then affirmed as a customary international norm by the International Court of Justice in the case of Democratic Republic of Congo v. Uganda...

Spectrum has been internationally accepted as a scarce, finite and renewable natural resource which is susceptible to degradation in case of inefficient utilization. It has a high economic value in the light of the demand for it on account of the tremendous growth in the telecom sector. Although it does not belong to a particular State, right of use has been granted to the States as per international norms.

In India, the courts have given an expansive interpretation to the concept of natural resources and have from time to time issued directions, by relying upon the provisions contained in Articles 38, 39, 48, 48-A and 51-A(g) for protection and proper allocation/distribution of natural resources and have repeatedly insisted on compliance with the constitutional principles in the process of distribution, transfer and alienation to private persons.

As natural resources are public goods, the doctrine of equality, which emerges from the concepts of justice and fairness, must guide the State in determining the actual mechanism for distribution of natural resources. In this regard, the doctrine of equality has two aspects: first, it regulates the rights and obligations of the State *vis-a-vis* its people and demands that the people be granted equitable access to natural resources and/or its products and that they are adequately compensated for the transfer of the resource to the private domain; and second, it regulates the rights and obligations of the State *vis-a-vis* private parties seeking to acquire/use the resource and demands that the procedure adopted for distribution is just, non-arbitrary and transparent and that it does not discriminate between similarly placed private parties.

Association of Unified Tele-Service Providers & Ors v. Union of India²⁰

Spectrum is a natural resource which belongs to people, and State, its instrumentalities or licensee, who deal with the same, hold it on behalf of the people and are accountable to the people

²⁰ (2014) 6 SC 110

Facts:

An appeal was filed challenging an order of the High Court whereby the CAG was held to have powers to conduct revenue audit of all accounts drawn by licensees and that accounts of licensee, in relation to revenue receipts, could be said to be accounts of Central Government and thus subject to revenue audit.

Issues:

1. Scope and ambit of the powers of the CAG, the TRAI and the DoT in relation to the proper computation and quantification of Revenue in determining the license fee and spectrum charges payable to the Union of India under Unified Access Services (UAS) Licenses entered into between DoT and the service providers.
2. Whether service providers were bound to make available all books of accounts and other documents maintained by them to CAG

Held:

State actions and actions of its agencies/instrumentalities/licensees must be for the public good to achieve the object for which it exists, the object being to serve public good by resorting to fair and reasonable methods. State is also bound to protect the resources for the enjoyment of general public rather than permit their use for purely commercial purposes. Public trust doctrine, it is well established, puts an implicit embargo on the right of the State to transfer public properties to private party if such transfer affects public interest. Further it mandates affirmative State action for effective management of natural resources and empowers the citizens to question ineffective management.

UAS license holders have an obligation to use such resources in a manner as not to impair or diminish the people's right and people's long term interest in that property or resource.

When nation's wealth, like spectrum, is being dealt with either by the Union, State or its instrumentalities or even the private parties, like service providers, they are accountable to the people and to the Parliament. Parliamentary democracy also envisages, inter alia, the accountability of the Council of Ministers to the Legislature.

The CAG is, therefore, an important functionary under the Constitution and, it is often said, he is the guardian of the purse and that he should see that not farthing of it is spent without the authority

of the Parliament. CAG had therefore, duty to examine and satisfy himself that all rules and procedures in that behalf were being met not only by Union but also service providers. CAG's function was, therefore, separate and independent, which was not similar to audit conducted by DOT - Service providers were bound to make available all books of accounts and other documents maintained by them under Rule 3, so as to ascertain whether Union of India was getting its full share of revenue.

VII. Zero-rated services: a competition law perspective

Zero-rated services broadly enable customers to download/upload particular content without incurring any data-usage charges. Though consumers of zero-rated services get the data usage free of cost, the actual benefits that accrue to consumers end there. Consumer choice is the first victim of zero-rated plans, as access is limited to one or few pre-determined services.

Further, consumers may be put to restricted access under zero-rated services without the consumer actually knowing about the fact that he is put to restricted access. A Digital Divide will thus be created, where a few will have access to all on-line content while the rest will have access only to a limited amount of curated content. A situation could thus arise, where consumers would be forced to hop from one zero-rated service platform to another so as to access the entire range of content and services that are offered on the Internet.

More importantly, consumers of zero-rated services will not benefit from a perfect competition in that domain. For instance, only a few content providers would join zero-rated service platforms to provide services. The benefit of those content providers, who have not joined the plan cannot be availed by the consumer.

Aside from consumers, zero-rated services will also operate to the mutual detriment of on-line content and applications providers, as the provision of such services are arguably violative of Section 3 (prohibition of anti-competitive agreements) and Section 4 (prohibition of abuse of dominance) of the Competition Act, 2002. Healthy competition in the market could be impacted in the following ways:

1. **Entry Barrier:** Established players will get into the Zero rating plans and medium and small players would be forced to negotiate with Internet Service Providers to gain market access enter into the platform by paying the Internet Service Providers in order to able to

compete in the market. If other players do not enter in the zero platform of the ISP then their 'app' will not be free for the end user, and in such a scenario the end user would prefer an app that is free rather than a one that is to be paid for. Therefore, it hampers competition.

2. **Denial of Market Access:** The Big player in any vertical of business can by entering in the zero plan can deny market access to other players or competitor. The other players or competitors will be either forced to join the zero platform or exit from the market itself.
3. **Accrual of benefits to consumers.** There is no benefits accrued to Consumers other than free data. The consumer will be at a disadvantage as there would not be competition among the service provider and also lesser consumer choice.
4. **Improvements in production or distribution of goods or provision of services;** There will be no improvement in production or distribution of goods or provisions of services and also No incentive for innovation. No person will have an incentive to create new applications as there are entry barriers. This will be actually hamper the growth of the market and effective allocation of resources.
5. **Promotion of technical, scientific and economic development by means of production or distribution of goods or provision of services.** There is no promotion of technical, scientific and economic development, on the other hand it will discourage technical, scientific and economic development As there is no incentive to provide open internet: Internet Service providers will then only provide internet for which they are being paid for by the OTTs and will not have any incentive to provide non sponsored internet.