

Hello,

Below Are My Answers For Each Of Questions Asked In Consultation Paper

**Q.1** How should “Internet traffic” and providers of “Internet services” be understood in the NN context?

- (a) Should certain types of specialised services, enterprise solutions, Internet of Things, etc be excluded from its scope? How should such terms be defined?
- (b) How should services provided by content delivery networks and direct interconnection arrangements be treated? Please provide reasons.

**Answer:** Internet Traffic Contains Various Protocols And Mechanisms And Content, There Are Photos And Videos And Emails Voip Services Which Requires Different Ways Of Implementation And Management, While Internet Services Are Services Provided By Various Service Providers Including Data Services From The Telecoms And Content Services Like Email Services And Searching Information By Internet Companies.

Traffic Management Has Been Done Since Very Long Time Even By Content Providers And Telecoms But Managing Traffic Does Not Mean Prioritizing Content From One Internet Company Over Another Internet Company Or App/Website, Net Neutrality Is Given Definitions By Various People Or Groups Suiting Their Interest, But The Actual Core Principle Of Net Neutrality Is Always In Terms Of Pricing And Speeds, While There Are Different Types Of Content And Different Traffic Management Techniques To Handle Contents Like Emails And Videos, There Have Been No Practices Of Managing Speeds And Prioritizing Contents From Content Providers On Basis Of Deals Earlier.

Hence NET NEUTRALITY IS DEFINED PROPERLY AS SAME PRICE FOR ALL WEBSITE/Apps i.e ENTIRE INTERNET AT SAME SPEEDS  
This Is The Widely Accepted Net Neutrality Definition World Wide

**(a)** Specialized Services Relating To Government Sectors Like Apps Of Police Or Emergency Services Can Be Excluded Provided They Are Only From The Government Side i.e Built By GOI Not Any Third Parties, Excluding Enterprise Solutions Can Give Unfair Advantage To Big Players Resulting In Monopolies And Giving Big Players Advantage Over Small Players Hence They Should Not Be Allowed, Even IoT services Relating Only To Government Or Emergency Services Provided By Governments Can Be Given Exemption, For Example Calling To Police 100 Number Works Even Without SIM On Phones, Such Kind Of Services Can Be Excluded By Providing Them Free

**(b)** Allowing Content Delivery Networks And Direct Interconnection Networks To Be Exempted From Net Neutrality Is Like Providing Certain Apps/Services Free By TSP's And Giving Them Unfair Advantage Over Smaller Players,

For Example If Airtel Provides Content Delivery Network Services On Their Own Network By Hosting Apps Like Wink or Hike On their Networks And Providing These

Apps To Airtel Users For Free Without Any Data Charges Citing The Reason Of Interconnectivity Solution Or CDN Will Undermine User Choice As The Airtel May Reduce Speeds For Accessing Apps Similar To Wink Or Hike And May Also Increase Data Tariffs Making User Forced Indirectly To Use Wink Or Hike Because They Are Free And They Can Be Delivered Faster To Airtel Users As The User Is Accessing Content That Is Present On His Network Locally Hence The Data Packets Need To Travel Less Distance Or Make Less Hops, Influencing User Choice Making Him Think That Hike Or Wink Is Faster Than Other Similar Apps, And Influencing Him/Her To Continue Using It Thus Making Other Apps Expensive Or Pricey To Access Providing Unfair Advantage To Its Own Apps

Also Much Resources Such As Bandwidth May Be Allocated By Airtel To Its Own Apps Thus Reducing The Infrastructure As More Resources May Be Allocated To Wink Or Hike, And Due To Shortage Of Spectrum Or Bandwidth Airtel May Increase Price For Others Who Need Full Internet Access And Use Data Packs By Purchasing Them

Also There Is Chance That Every Network Provider Will Come Out With Their Versions Of Google Or Hike By Launching And Hosting Their Own Apps Or Apps By Tieup Companies Or Sister Organizations On their Network Thus Resulting In Much Chaos

By This Are We Forcing The User To Use 10 Different SIMS For Ten Different Internet Services Needed By Him While Accessing Internet, As One Internet Service May Be Free On A Particular Network But Not Other Network

Thus Creating Monopolies, Market Distortion And Consumer Lack Of Choice Thus Affecting The Consumer And Other Smaller Content Providers

There Is Also Chance Of Data Centers Losing Business As TSP Will Be Acting Like Data Centers Which Host Website/Apps And Provide The Content To All Whether They Are From Airtel Or Jio At Same Speeds, If TSP Become Data Centers Then Content Providers Need To Host Their Content On Multiple Networks Instead Of Single Network As Of Today In Order To Make Their Content Accessible To All, Which Creates A Lot Of Distortion In Market

**Q.2** In the Indian context, which of the following regulatory approaches would be preferable:

- (a) Defining what constitutes reasonable TMPs (the broad approach), or
- (b) Identifying a negative list of non reasonable TMPs (the narrow approach).

**Answer: (a)** Reasonable Traffic Management May Constitute Managing Content Based On Type That Too For Improving Efficiency Of Network Not Managing Speeds Or Prioritizing Content Based On Content Providers Rather It Should Be Prioritized On

Basis Of Interests To Make Network Efficient And To Reduce Congestions, For Example Emails Are Sent Via SMTP While Emails Can Be Received BY IMAP Or POP Based On Choice Of Network Admin To Reduce Congestion And Improve Network Efficiency Rather Than,Or Secure Way Of Accessing Content Like Showing A Https Form Of Website First If There Is One By Content Provider But This Should Not Be Taken As Those Who Don't Have Https Access Should Not Be Shown,Like If A User Is Accessing XYZ Website And If there Is HTTPS Available From XYZ User Should Be Directed To It But If User Is Accessing XYZ Website And It Does Not Have HTTPS User Should Not Be Directed To Another Website Providing Same Content As XYZ Just Because It Has The HTTPS Access If That Is Done Then User Choice Will Not Be Respected And Also It Gives Unfair Advantage To Competitor Of XYZ Website As Well

**(b)** Non Reasonable TMP May Include CDN(Content Delivery Networks) Where TSP Will Try To Be The Internet It Will Create Its Own Version Of Internet Services Like Gmail Or Bing And Provide It Faster As The Network Is Hosting The Content Making It Similar To LAN And Making Data Travel Shorter And Also Making It Free Of Cost To Access,Thus Every TSP Will Come With Their Own Internet,And It Shall Create Monopolies And Market Distortion Influencing User Choice And QoS And Affecting Smaller Players

**Q3:** If a broad regulatory approach, as suggested in Q2, is to be followed:

(a) What should be regarded as reasonable TMPs?

(b) Whether and how should different categories of traffic be objectively defined from a technical point of view for this purpose?

(c) Should application-specific discrimination within a category of traffic be viewed more strictly than discrimination between categories?

(d) How should preferential treatment of particular content, activated by a users choice and without any arrangement between a TSP and content provider, be treated?

**Answer: (a)** Reasonable Traffic Management Can Be Regarded As Managing Protocols For Delivery Of Various Type Of Content And Caching Management Etc In Order To Deliver The Content Irrespective From The Source i.e Provider Which is Lawful Very Fast,Prohibiton Of Pornographic Or Any Other UnLawful Content Can Be Considered As Reasonable Traffic Management,Removal Of Pirated Software Links Or Movies Or Any Other Content Can Be Fine.

**(b)** Ensuring Bandwidth Management Practices In Order To Avoid Poor Network links Or Paths For Speedy Delivery Of Content,Content Delivery Over Protocols Like HTTPS Or HTTP,VOIP IMAP,POP,SMTP, Etc Ways Of Content Handling Can Be Ok.

**(c)** Yes Prioritizing Content Of Same Category On Basis Of Source Or Providers Should Be Seen As Monopolies,Giving Unfair Advantage For Bigger Players Over Smaller Players And Affecting Qos Of Users And Restricting User Choice Hence Should Not Be Allowed

**(d)** No Prioritizing Content Even On Choice Of Users May Be Used As A Loophole By Big Content Providers Like Google Or Facebook,As For Example Facebook May Say Or Advertise That If User Has Selected Their App Over Twitter By Users Or For Social Media Services To Be Prioritized By Users For Delivery Of Their Content At Less Price Or Free Of Cost And Good Speeds, Indirect Data Reimbursement Can Be Provided By Content Providers Like Facebook,It May Advertise That If User Selects Their App To Be Prioritized Then It May Give Them 1GB Data Free Or Any Such Coupons,Which May Influence User To Continue Use Facebook Over Twitter,Big players May Continue To Give Such Incentives Over Small Players With Money Power Thus Influencing User Choice And Building Up Their Monopoly,Even QoS May Be Affected Tomorrow Facebook May Say To See A Video Ad For Sending Friend Request To Other Users,Thus Users Will Be Taken For A Ride,Also Small Players Will Be Not Able To Offer Such Incentives Thus Affecting Them,Which Can Be Termed AS Zero Rating In A Disguize,As This Is Similar Scenario Taking Place

**Q.4** If a narrow approach, as suggested in Q2, is to be followed what should be regarded as non reasonable TMPs?

**Answer:** No Such Practices Should Not Be Allowed As Explained In Answer To Particular Question Above Such Practices Will Affect Users And Startups,If At All There Should Be Any TMP Done It Should Be Done Only On Basis Of Emergency Governments Services That Can Be Delivered Free Of Cost Or Given Priority,And Unlawful Content Or Network Risky Contents Such As Malwares Etc Should Be Allowed To Managed Or Prohibited Apart From These No Other Practice Should Be Allowed By The Government

**Q.5** Should the following be treated as exceptions to any regulation on TMPs?

- (a) Emergency situations and services;
- (b) Restrictions on unlawful content;
- (c) Maintaining security and integrity of the network;

(d) Services that may be notified in public interest by the Government/ Authority, based on certain criteria; or

(e) Any other services.

Please elaborate.

**Answer:** (a) Yes But These Should Be Provided By Government Only

(b) Yes

(c) Yes Malwares Or Viruses Etc Should Be Managed

(d) Yes

(e) No Only Services Deemed To Be Necessary And Are Of Emergency Nature By Government Should Be Allowed To Be Managed Or Prioritized

**Q.6** What could be the principles for ensuring nondiscriminatory access to content on the Internet, in the Indian context?

**Answer:** India Is Third Largest Startup Place In World,This Was Declared By GOI Itself In The Past,And India Has About 600 MN Internet Users Already,Hence Non Discriminatory Access Or Net Neutrality In Context Of India Can Be Defined As Non Discrimination Of Content In Form Of Speeds Or Price On Basis Of Content Providers Or Deals Between TSP's And Content Providers,Which Shall Protect Interest Of Consumer And Improve QoS Also Help In Job Creations By Encouraging More Start Ups To Come Up,And With Job A Person Can Also Purchase Internet Pack Of His Choice Thus Resulting Him Not To Depend On TSP Or Content Provider For Internet Access And Allowing Them Not To Be Taken For Ride By TSP And Content Providers

**Q.7** How should the following practices be defined and what are the tests, thresholds and technical tools that can be adopted to detect their deployment

(a) Blocking;

(b) Throttling (for example, how can it be established that a particular application is being throttled?);

(c) Preferential treatment (for example, how can it be established that preferential treatment is being provided to a particular application?)

**Answer:** (a) Type the website's IP address into the browser instead of "www.website.name." You can find a website's IP address by opening the Command

Prompt and typing "tracert www.websitename.com" where "websitename" is the name of the site you suspect is blocked. The first IP that shows at the top of the list is the IP address of the website.

Use a proxy server to access the website. If the website shows up when you access it with a proxy, you can be fairly certain your ISP/TSP has blocked the site. Find a free proxy by performing an Internet search. How you access the site using a proxy depends upon your browser; look for Proxy Settings in your browser's "Tools" or "Options" menu. You should be able to find Proxy Settings in the network menu. Usually, entering the IP address and Port address of the proxy is all you'll need to bypass your ISP/TSP and load the website using a proxy.

Access the website from different service providers On Mobile Or Desktop. And If They Are Accessible They Are Blocked By ISP Or TSP

**(b)** There are Several Tools Available Online Which Run Tests For P2P Apps Like Torrents, Standard Protocols Like IMAP HTTP Etc, Video Streaming And Lets Users Know About It Also Google Has Launched Measurement Lab(M-Lab) Services To Know ISP/TSP Throttling And There Are Various Other Speed Test And Other Tools

**(c)** A Website/App Can Be Pinged Using Command Prompt On Computers And Response Time For It Will Be Shown In ms(Milliseconds), i.e Time Of Travelling By Data Packets Of Certain Size, If The Travelling Time Of Data Packet Is Less For A Certain Website And More For Similar Category Website By Another Provider Then It Can Be Established That Priority Is Being Given To That First Website, Also There Are Several Tools That Are Available Online Which Can Help To Differentiate And Know The Difference

**Q.8** The quality of Internet experienced by a user may also be impacted by factors such as the type of device, browser, operating system being used. How should these aspects be considered in the NN context? Please explain with reasons.

**Answer:** Net Neutrality Defines Non Discrimination Of Content On Basis Of Price Or Speeds Only, While Most Of Users Know There Are Variety Of Internet Packages Available For Mobile Devices Which Support Specific Devices And Offer A Specific Range Of Speed, For Example The Minimum Network Quality Is 2G In Our Country Which offers Speeds Maybe Upto 128kbs

While 3G Offers Internet Speeds Upto 5Mbps And Is Supported By Specific 3G Enabled Devices, While 4G Offers Upto 41 Mbps And 5G May Provide Upto 100 Mbps Speeds For Supported Devices, Here These Speeds Are Not Being Managed By TSP That Is If A User Is Having 2G Connection The Speed May Be Upto 128 Kbps For All Websites/Apps And That Can Be Checked By Various Speed Test Mechanisms Thus Tsp Is Not Giving High Speeds For Website Of His Choice And If A User Has Device That Supports 3G Or 4G He Can Get That Speed And Service Provided His Device

Supports It.Hence There Is No Involvement Of TSP Or Content Providers Here,Thus Its Not Violation Principles Of NN

**Q 9:** Which of the following models of transparency would be preferred in the Indian context:

- (a) Disclosures provided directly by a TSP to its consumers;
- (b) Disclosures to the regulator;
- (c) Disclosures to the general public; or
- (d) A combination of the above.

Please provide reasons. What should be the mode, trigger and frequency to publish such information?

**Answer:** (d) A Combination Of Above Should Be Used To Disclose What User Is Getting In Any Specific Internet Plan,Also Such information Should Be Provided On The ISP/TSP Website/Apps And At Retail Or Wholesale Outlets And Should Be Given Information In Form Of Email Or SMS Every Month Or At Time Or Renewal Or At Users Request Even On Phone To Call Centers Of ISP Or TSP Or Whenever User Is Switching Over Plan A To Plan B

**Q.10** Please provide comments or suggestions on the Information Disclosure Template at Table 5.1? Should this vary for each category of stakeholders identified above? Please provide reasons for any suggested changes.

**Answer:** Any Blocking Of Services The Reasons Should Also Be Mentioned As To Why And Under Which Law That App/Service Is Blocked,Any Prioritization Of Services Should Not Be Allowed At First Instance And If A Prioritization Is Being Done It Should Be Justify The Need For It And Why Its Only Selected To Be Prioritized Over Other competitors And Under Which Law It Should Be Allowed Should Also Be Specified,Any Specialized Services If Provided Should Be Justified By Proper Reason And Under What Law And Regulation Are Being Provided Should Be Intimated To Regulator And General Public And Consumers

**Q.11** What would be the most effective legal/policy instrument for implementing a NN framework in India?

(a) Which body should be responsible for monitoring and supervision?

(b) What actions should such body be empowered to take in case of any detected violation?

(c) If the Authority opts for QoS regulation on this subject, what should be the scope of such regulations?

**Answer: (a)** Trai Can Itself Look About NN Issues, If A Separate Body Is Formed It Would Be Much Better, And Can Be Also Less Burdened With other Works, Exclusively Looking Over Issues Pertaining To NN Just Like Traffic Police Under Policing Manages Traffic Issues And Cyber Crime Police Manage Cyber Issues, A Separate Body If Constituted Would Be Much Better.

**(b)** The Body Should Be Given Legal Powers To Ban Any TSP Or Content Providers Who Practice Anti Competitive Practices Such As Price Or Speed Discrimination Of Content Should Be Not Allowed To Continue Services In India And TSP License Should Be Revoked, Hefty Penalties On TSP And Content Providers Should be Levied, And Content Provider Services Should Be Banned In India

**(c)** Any Sort Of Regulations Should Not Allow Discrimination On Basis Of Price Or Speeds, And If QoS Regulation Needs To Be Allowed Then It Should only Look Into Whether Content Is Provided Irrespective Of Content Provider At Same Speeds And Price

**Q.12** What could be the challenges in monitoring for violations of any NN framework? Please comment on the following or any other suggested mechanisms that may be used for such monitoring:

(a) Disclosures and information from TSPs;

(b) Collection of information from users (complaints, user-experience apps, surveys, questionnaires); or

(c) Collection of information from third parties and public domain (research studies, news articles, consumer advocacy reports).



**Answer: (a)** Disclosures And Information From TSP Should Be Sought Every Month Whether They Are Following Principles Of Non Discriminatory Access On Basis Of Price And Speeds Of Content

**(b)** Collection Of Information From Users Should Be Given More Importance Than Information Revelation From TSP,As TSP May Not Provide Information Fully And May Try Not To Disclose Any Malpractices Done By It Against Non Discrimination Of Access On Basis Of Price And Speeds Of Content,TRAI Or GOI Should Be Launching App/Website Where User Can Disclose Such Complaints,Information About Breach Of Non Discriminatory Access On Basis Of Price And Speeds,Also Surveys And Questionnaires Should Be Done By TRAI On A Regular Basis Every Quarter Where User Can Answer It And Rate His Experience Of QoS By TSP,

(c) Collection Of Information From Newspapers Or Any Other Public Sources As Media Or TV Reports Or Technical Agencies Etc Should Also Be Given Priority As Certain Times Users May Not Know Technicalities Of NN And May Not Have Access To Tools That Can Monitor Such A Discrimination Of Content By TSP On Basis Of Price Or Speed

**Q 13:** Can we consider adopting a collaborative mechanism, with representation from TSPs, content providers, consumer groups and other stakeholders, for managing the operational aspects of any NN framework?

(a) What should be its design and functions?

(b) What role should the Authority play in its functioning?

**Answer:** Yes A Collaborative Mechanism May Be Formed With Representation Of TSP's Content Providers,Consumer Groups And Other Stake Holders For Managing Aspects Of NN

**(a)** The Service Providers Such As TSP's Can Be 1 Member From COAI Or Any Other Collective Body Of TSP's,More Number Of Members From Consumer Groups Namely 2 Can Be Given And One Member From Content Providers Side Like IMAI Or Any Common Body Can Be Given 1 Number Of Representation,And Other Stake Holders Can Be Given 1 Number.

**(b)** The Authority Should Facilitate Such Collabrations And May Have The Final Decision Taken On Basis Of The Opinions From All

**Q.14** What mechanisms could be deployed so that the NN policy/regulatory framework may be updated on account of evolution of technology and use cases?

**Answer:** The Core Principles Of NN Must Be Followed That Is Non Discrimination On Basis Of Price Or Speeds And If this Is Followed Reasonable Traffic Management To Provide Safer Networks And Avoid Congestions Can Be Allowed Thus It May Not Hinder Adoption Of Newer Technologies As Evolution Of Newer Protocols Like HTTPS From HTTP Or 5G From 4G Networks Do Not Create Any Discrimination In Terms Of Content From Content Providers On Basis Of Price