Upbhokta Margdarshan Samitti UMAS, Jodhpur

Comments on Consultation paper On

Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed

Introduction:-

The growth in data traffic is being driven both by increased smartphone subscriptions and a continued increase in average data volume per subscription, fueled primarily by increased viewing of video content.

India's surging market for mobile phones and 4G data users has not helped in taking the country up in terms of data speed. The recent Speedtest Global Index by Ookla has ranked India's mobile internet speeds at 131 for mobile internet speeds, much behind its neighbouring nations like South Korea, Sri Lanka, and even Nepal and Pakistan. India's average mobile download speed is 12.07 Mbps, much lower than the global average of 35.26 Mbps, according to the index for September 2020.

ISSUES FOR CONSULTATION:

- Q.1: Should the existing definition of broadband be reviewed? If yes, then what should be the alternate approach to definebroadband? Should the definition of broadband be:
- $\textbf{a. Common or separate for fixed and mobile broadband?} \\ Separate.$
- b. Dependent or independent of speed and/or technology? Independent
- c. Based on download as well as upload threshold speed, orthreshold download speed alone is sufficient?download as well as upload threshold speed.
- d. Based on actual speed delivered, or on capability of theunderlying medium and technology to deliver the defined threshold speed, as is being done presently?

Based on actual speed delivered.

Please suggest the complete text for revised definition of the broadband along with the threshold download andupload speeds, if required for defining broadband.

Kindly provide the reasons and justifications for thesame.

Should the existing definition of broadband be reviewed?

Yes.

Rapid grow of streaming video services, we appeal TRAI to definebroadband as speeds of at least 100 Mbps.

The streaming landscape has changed so radically in the lastfew years so that Authority should raise the benchmark.

Some digital content service providers offerings 4K which requires higher bandwidth than standard definition (SD) video.

Multiple active streaming in a household would therefore require speeds significantly greater than 10 Mbps.

The increase in the over the top (OTT) services communities also increasingly depend on faster broadband speed to access highbandwidth applications

Tele Medicine; Tele Health services.

Definition of Broadband: High speed telecommunication system

Q.2: If you believe that the existing definition of broadbandshould not be reviewed, then also justify your comments.

Comments:

Mentioned at above.

Q.3: Depending on the speed, is there a need to define different categories of broadband? If yes, then kindly suggest the categories along with the reasons and justifications for the same. If no, then also justify your comments.

Comments: Yes.

There should be two type of broadband speed depending on speed:

- (1) Basic broadband speed- 50 Mbps | SD, HD, HDR, Gaming etc.
- (2) High speed broadband 100 Mbps || Streaming, Multitasking

Q.4: Is there a need to introduce the speed measurement program in the country? If yes, please elaborate the methodology to be implemented for measuring the speed of a customer's broadbandconnection. Please reply with respect to fixed line and mobile broadband separately. Comments: Yes.

A separate entity may create for Broadband Development in India which includes deferent Regulatory bodies, Govt. organisations, Pvt. Entity, NGOs, Public etc.

Q.5: Whether the Indian Telegraph Right of Way (RoW) Rules 2016have enabled grant of RoW permissions in time at reasonable prices in anon-discriminatory manner? If not, then please suggest further changes required in the Rules to make them more effective.

Comments: The Right of Way rules are not yet to bring benefit to the telecom sector due to lack of clarity and implementations.

Q.6: Is there any alternate way to address the issues relating to RoW? If yes, kindly elucidate.

Comments:
One Window
Once Diging Policy

Sharing Infrastacture policy.

Q.7: Whether all the appropriate authorities, as defined under the Rules, have reviewed their own procedures and align them with the

Rules? If no, then kindly provide the details of such appropriate authorities.

Comments: No.

Q.8: Whether the RoW disputes under the Rules are getting resolved objectively and in a time-bound manner? If not, then kindly suggest

further changes required in the Rules to make them more effective.

Comments: No.

Common Framework established for dispute resolution at national level.

Q.9: What could be the most appropriate collaborative institutional mechanism between Centre, States, and Local Bodies for common

Rights of Way, standardization of costs and timelines, and removal of barriers to approvals? Justify your comments with reasoning.

Comments: DOT may be appropriate institute for the same as they have good stuff of telecom sector.

Q.10: Should this be a standing coordination-committee at Licensed Service Area (LSA) level to address the common issues relating to $RoW\,$

permissions? If yes, then what should be the composition and terms of reference of this committee? Justify your comments with reasons.

Comments: DOT may appoint a officer to resolve these issues at LAS level.

Q.11: Is there a need to develop common ducts along the roads and streets for laying OFC? If yes, then justify your comments.

Comments: Yes.

Once Diging policy best solution for the OFC laying.

Q.12: How the development of common ducts infrastructure by private sector entities for laying OFC can be encouraged? Justify yourcomments with reasoning.

Comments: Single Window online clearance, Cost effective, availability

Q.13: Is there a need to specify particular model for development of common ducts infrastructure or it should be left to the land-owning agencies? Should exclusive rights for the construction of common ducts be considered? Justify your comments with reasoning.

Comments: Yes.

Q.14: How to ensure that while compensating the land-owning agencies optimally for RoW permissions, the duct implementing

agency does not take advantage of the exclusivity? Justify your comments with reasoning.

Comments: Mentioned at above.

Q.15: What could be the cross-sector infrastructure development and sharing possibilities in India? Justify your comments with examples.

Comments: Once Digging policy best solution for the same.

Q.16: Whether voluntary joint trenching or coordinated trenching is feasible in India? If yes, is any policy or regulatory support required

for reaping the benefits of voluntary joint trenching and coordinated trenching? Please provide the complete details.

Comments: Mentioned at above.

Q.17: Is it advisable to lay ducts for OFC networks from coordination, commercial agreement, and maintenance point of view along with any other utility networks being constructed?

Comments: Mentioned at above.

Q.18: What kind of policy or regulatory support is required to facilitate cross-sector infrastructure sharing? If yes, kindly provide the necessary details.

Comments: Mandatory availability and sharing Infrastructure policy may develop to get rid of same.

Q.19: In what other ways the existing assets of the broadcasting and power sector could be leveraged to improve connectivity, affordability, and sustainability.

Comments: Focus on availability& sharing

Q.20: For efficient market operations, is there a need of e-marketplace supported by GIS platform for sharing, leasing, and trading of Ductspace, Dark Fiber, and Mobile Towers? If yes, then who should establish, operate, and maintain the same? Also, provide the details of suitable business model for establishment, operations, and maintenance of the same. If no, then provide the alternate solution formaking passive infrastructure market efficient.

Comments: Yes.

Q.21: Even though mobile broadband services are easily available and accessible, what could be the probable reasons that approximately 40% of total mobile subscribers do not access data services? Kindly suggest the policy and regulatory measures, which could facilitate increase in mobile broadband penetration.

Comments: Digital literacy program & Join hand between all Ministries.

Q.22: Even though fixed broadband services are more reliable and capable of delivering higher speeds, why its subscription rate is so poor in India?

Comments: Non Availability and service maintenance is the big issue.

Q.23: What could be the factors attributable to the slower growth of FTTH subscribers in India? What policy measures should be taken to improve availability and affordability of fixed broadband services? Justify your comments.

Comments: Add Telecom as essential service in Building code of India.

Q.24: What is holding back Local Cable Operators (LCOs) from providing broadband services? Please suggest the policy and

regulatory measures that could facilitate use of existing HFC networks for delivery of fixed broadband services.

Comments: Broadcasting is different sector, ISP integration with LCO may help to use of existing HFC networks for delivery of fixed broadband services.

Q.25: When many developing countries are using FWA technology for provisioning of fixed broadband, why this technology has not becomepopular in India? Please suggest the policy and regulatory measures that could facilitate the use of FWA technology for delivery of fixed broadband services in India.

Comments: Costly & unstable

Q.26: What could be the probable reasons for slower fixed broadband speeds, which largely depend upon the core networks only? Is it due to the core network design and capacity? Please provide the complete details.

Comments: Network design is not upto mark.

Q.27: Is there a need of any policy or regulatory intervention by way of mandating certain checks relating to contention ratio, latency, andbandwidth utilization in the core network? If yes, please suggest the details. If no, then specify the reasons and other ways to increase the performance of the core networks.

Comments: Yes || Proper monitoring may improve the performance of core networks.

Q.28: Should it be mandated for TSPs and ISPs to declare, actual contention ratio, latency, and bandwidth utilization achieved in their core networks during the previous month, while to their customers while communicating with them or offering tariff plans? If no, statethe reasons.

Comments: Yes.

Q.29: What could be the probable reasons for slower mobile broadband speeds in India, especially when the underlying technologyand equipment being used for mobile networks are similar across the world? Is it due to the RAN design and capacity? Please provide the complete details.

Comments: Bandwidth availability; Large user base; Unnecessarily usage

Q.30: Is there a need of any policy or regulatory intervention by way of mandating certain checks relating to RAN user plane congestion? What should be such checks? If yes, then suggest the details, including the parameters and their values. If no, then specify the reasons and other ways to increase performance of RANs.

Comments: No

Q.31: Should it be mandated to TSPs to declare actual congestion, average across the LSA, recorded during the previous month over theair interface (e.g., LTE Uu), in the radio nodes (e.g., eNB) and/or over the backhaul interfaces between RAN and CN (e.g., S1-u), while reaching out to or enrolling a new customer? If so, then suggest some parameters which can objectively determine such congestions. If no,then specify the reasons and other ways to increase performance of the RAN.

Comments: Yes.

Q.32: Is there a need of any policy or regulatory intervention by way of mandating certain checks relating to consumer devices? If yes, then please suggest such checks. If no, then please state the reasons.

Comments: No.

Q.33: To improve the consumer experience, should minimum standards for consumer devices available in the open market bespecified? Will any such policy or regulatory intervention have potential of affecting affordability or accessibility or both forconsumers? Please justify your comments.

Comments: Yes.

gand Ai

Liyakat Ali

UMAS, Jodhpur

Email:-

jams@trai.gov.in sksinghal@trai.gov.in.