

**Consumer Protection Association,  
Jai Somnath,  
Himmatnasgar,  
Dist. Sabarkantha, Gujarat**

To,

Hon. Dr. J.S.Sharma,  
Chairman,  
TRAI, NEW DELHI.

Sub. : Submission of comments on Consultation paper  
on National Broadband plan.

Hon. Sir,

Please find herewith our comments on consultation  
paper on National Broadband Plan issued by TRAI.

Please acknowledge the receipt.

Thanks.

Yours faithfully,

( Dr. Kashyapnath )  
President

## **CONSULTATION PAPER ON NATIONAL BROADBAND PLAN**

In order to ensure continuous growth of the country, a rapid spread of Broadband in both the urban and rural areas is an imperative. The Indian demographic pattern indicates that villages and cities are scattered by location and India has varied geographical pattern such as desert and hilly areas etc. Apart from this about 70% population lives in rural areas.

The rural areas have :

1. Poor infrastructure
2. Non availability of electricity. Only 55% villages are electrified.
3. Non availability of Road connectivity
4. Non availability of Educational support
5. Non availability of technical staff
6. Low penetration of fixed line services

In such circumstances wireless broadband could be the quickest way to increase the broadband penetration.

5.1 What should be done to increase Broadband Demand :

1. Affordability of price, reliable standard quality of service and on demand connection has direct impact to increase the demand. There must be some efforts to reduce various cost associated in providing broadband services.
2. The cost of operations should be low.

3. To increase the Demonstrations and awareness about the content, application and benefits of broadband in Urban, Rural and Tribal areas.
4. Broadband connection should be mandatory for the Gram Panchayat as the NAREGA activities are online.
5. It should be mandatory for the 50,000 PHC and 6,000 CHCs for Tele-medicines.
6. To promote lower cost availability of internet access like mobile connections.
7. There should be a computer literacy program.
8. Subsidize the cost of concerning computer material.
9. The policy with short, medium and long term plan should focus on expanding the broadband infrastructures and the users.
10. There should be low cost consumer premise equipment.
11. There should be low level of tariff. The tariff level is still higher than the most countries.
12. The content should be in local language. A special software should be developed for it.
13. Only about 10% of schools have personal computers and broadband connection is almost non-existent. A special plan should be prepared for it.
14. Involve local NGOs in the awareness building programmes.

Most of the applications where we need broadband connection are video based. In our survey we found that most of the people are using these applications in online gaming site, video streaming site

like You Tube, Face book, twitter, orkut etc. social networking sites. In Asian countries the main trigger for broadband demand is e-commerce, blogging, Internet based phone, Video calls etc.. Apart from this Digital Entertainment is one of the major cause for increasing consumer demand for broadband.

15. Our cyber and entertainment law should be more flexible to enhance the broadband growth.
  16. The minimum standard speed should be 256 kbps just like as in many European countries.
  17. The government intervention should be focused on encouraging consumer demand with more software for enabling e-commerce, e-applications etc..
- 5.2. What, according to You, will improve the Perceived utility of broadband among the masses?
1. E-Governance : E-Governance should be utilized for information and communication. There should be Digitalization of land records, online issuances of ration cards, identity cards, old age pension card etc..
  2. E-Health - Telemedicine
  3. E-Education-learning
  4. Online bill payment
  5. E-commerce – on line shopping
  6. Entertainment
  7. Social networking Service

8. Innovative use of technology in imparting education and increasing literacy
  9. Agriculture
  10. Developing innovative offers to drive down prices and thereby improving affordability of access devices and broadband connectivity to the common man.
  11. Providing secure, high speed and reliable broadband connectivity with high QoS standard.
  12. Supporting development of a vibrant market for innovative content in various Indian languages .
  13. Providing content targeted at rural markets . These need to be focused on education, healthcare, information, communication, entertainment etc. needs keeping in mind.
- 5.3. What measures should be taken to enhance the availability of useful applications for broadband
1. Promoting regional-specific content applications with the help of NGOs and governments bodies for identification of applications and financial support from the government and private sector for content and programme development.
  2. Offering ready and easy access to application developers making them available existing database.
  3. Expanding the range and quality of online Government services.
  4. Device a special subsidy schemes for both the broadbands specially for rural and tribal areas.

5. Device attractive schemes for rural and tribal areas.
6. Device schemes for rural and tribal broadband connections for schools, PHCs, Hospitals etc..
7. To create a effective redressal forum

5.4 How can broadband be made consumer friendly especially to those having limited knowledge of English and Computer.

1. Developing applications in local understandable languages with extensive use of graphics.
2. Important websites should be available in the vernacular language.
3. Conducting training programmes on the use of computer, internet and intelligent terminals.
4. More user-friendly CPEs at an affordable prices.
5. creates an Online Digital Literacy Portal.
6. Making content available in local languages.
7. Tools are available to translate web content from one language to another.
8. Use of applications like virtual key boards to interact and punch in details in the local language. Google provides local languages translation and virtual keyboard applications, free of cost.
9. Govt. should encourage development of such applications.
10. Broadband acceptance would also improve with technologies, functionalities, services, and experiences being available in local languages.

11. Public private partnership should be developed.
12. Voluntary organisations should be encouraged for the awareness.
13. Using available information for local areas with the help of NGOs, local bodies to identify local, region specific needs.
14. Conducting training/awareness initiatives, programmes in the use of computers and intelligent terminals. Awareness and training on use of internet/BB and other ICT tools right at the schools level to engage the youth.
15. Advertisement campaigns on regional and National both media.
16. Enhancement of different applications to overcome the need to know English.

5.5 : Do you agree with projected broadband growth pattern and futuristic bandwidth requirements :

The broadband can grow in many different ways and the results may vary accordingly. However, it is a fact that the current infrastructure is definitely short in terms of the emerging needs.

The real challenge in rural broadband lies in increasing the PC penetration. The estimated PC penetration number is quite less compared to the 91.25 million. The gap can be filled only by using other CPEs like 3G mobile. So the success of 3G mobile technology for broadband penetration is really going to play a key role in increasing broadband penetration.

The support must be available for not just the infrastructure but also for the CPE and the content.

The future planning should be done on the basis of requirements of large bandwidths in the Access as well as backhaul networks.

To achieve the projected broadband growth we should focus on :

1. Establishment of broadband infrastructure.
2. Promote effective use in leading areas like Medicine etc..
3. Structural reform in additional areas

The provision of broadband services in rural areas can be expeditiously achieved by adopting a suitable incentive-based approach.

5.6 : Do you agree that existing telecom infrastructure is inadequate to support broadband demand? If so what actions has to be taken to create an infrastructure capable to support futuristic broadband?

Yes, The existing telecom infrastructure is inadequate to support broadband demand.

1. Infrastructure roll-out in the country should be shared with the other operators.
2. Existing infrastructure need upgradation / expansion.
3. The Government should continue to adopt

pro-growth regulation which will encourage private and public investments in the telecom sector.

4. Support to service providers to lay down broadband infrastructure in areas which are economically unviable should be provided.
5. The mobile usage became viable for the common man only after both the mobile equipment prices and the mobile usage charges became one of the cheapest in the world. That led to the rapid growth of mobile users. So either government or the operators should take necessary action to reduce the charges.

5.7 : What network topology do you perceive to support high speed broadband using evolving wireless technologies ?

In Indian context and circumstances wireless broadband could be the quickest way to increase the broadband penetration primarily. But quality of services cannot be attained as compared to a bandwidth rich optical network. Fiber rich access networks will allow consumers to use today's and tomorrow's high-bandwidth applications, such as video streaming, video-telephony ...etc. The paramount need is to establish a highly competitive supply environment which is both technology and service neutral and this can be done only by deployment of both wireless and optic fibre cable based networks.

5.8 : What actions are required to ensure optimal utilization of existing copper network used to provide wireline telephone connection ?

1. Infrastructure roll-out in the country should be shared with the other operators.
2. Existing infrastructure need upgradation / expansion.
3. TRAI should regulate the wholesale tariff.
4. Existing Copper networks should be replaced by fiber network gradually as optical fibre is known to enable maximum bandwidth amongst all technology available today.

5.9 : Do you see prominent role for fiber based technologies in access network in providing high speed broadband in next 5 years? What should be done to encourage such optical fibre to facilitate high speed broadband penetration?

We see prominent role both for fibre based technologies as well as wireless technologies in the Access Network for providing high speed broadband in next 5 years.

1. There should be national policy on raw material.
2. Customs and excise duty should be reduced.
3. Subsidy for rural and tribal areas.

5.10: What changes do you perceive in existing licensing and regulatory framework to encourage Cable TV operators to upgrade their networks to provide broadband ?

1. As per the present ISP license, the operators are already permitted to use the last mile of cable operator to provide the broadband services.
2. TRAI should mandate the digitalization plan in a time bound period.

5.11: Is non-availability of optical fibre from district/cities to villages one of the bottlenecks of effective backhaul connectivity and impacts roll out of broadband services in rural areas?

Though backhaul is always an important factor for broadband access – the availability of fiber on all routes may not be an imperative. For the more remote areas where even basic Internet access is lacking, even low bandwidth backhaul on microwave or other technologies could be contemplated. And this would be adequate to cater to the initial data demands of first time users.

January 2008, the TRAI itself had noted in its recommendations on growth of broadband the possibility of using wireless for back haul.

5.12: If so, is there a need to create national optical fibre network extending upto villages?

Yes.

5.13: In order to create National optical fibre core network extending upto villages, do you think a specialized agency can leverage on various government schemes as discussed in para B?

Yes.

5.14: Among the various options discussed in para 3.35 to 3.37, what framework do you suggest for National Fibre Agency for creating optical fibre network extending upto village level and why?

The day to day operations need to be controlled by a national agency and TRAI. The entire supervisory, planning and traffic has to be under the control of such an agency. The agency must have representatives from all the stake holders and has to be mostly funded by the government or PPP mode.

5.15 What precautions should be taken while planning and executing such optical fibre network extending upto villages so that such networks can be used as national resource in future? What is suitable time frame to rollout such project?

1. The planning should be done from a long term perspective.
2. The planning should be done in a way that the network should be able to cater to the future high bandwidth requirements.

3. Timeframe for roll-out would be 2 years for geographies where existing n/w is there within 10 Kms coverage.

5.16: Is there a need to define fixed line and mobile broadband separately? If yes, what should be important considerations for finalizing new definitions?

Should be redefine regarding the speed.

5.17 Is present broadband definition too conservative to support bandwidth intensive applications? If so, what should be the minimum speed of broadband connection?

Yes, 256 Kbps speed should be replaced with at least 512 Kbps.

5.18 What specific steps do you feel will ease grant of speedy ROW permission and ensure availability of ROW at affordable cost?

Uniform National Policy.

5.19 Does the broadband sector lack competition? If so, how can competition be enhanced in broadband sector?

Enough competition. As per the consultation paper there are 104 service providers providing broadband services in India.

5.20 Do You think high broadband usage charge is hindrance in growth of broadband? If yes, what steps do you suggest to make it more affordable?

Yes.

There should be concerted efforts to make broadband more relevant for people so that there is large scale adoption of broadband services. All applications which are critical for mass adoption should be subsidized.

5.21 Do you think simple and flat monthly broadband tariff plan will enhance broadband acceptability and usage?

Yes.

5.22 Should broadband tariff be regulated in view of low competition in this sector as present?

Tariff regulation at this stage would delay investments in the sector. It is therefore suggested that tariffs should not be regulated.

5.23 What should be the basis for calculation of tariff for broadband, if it is to be regulated?

5.24 How can utilization of international internet bandwidth be made more efficient in present situation?

Though the international traffic has reduced over the past 2-3 years but it can be further improved by creating and promoting domestic and regional language content & applications, e-governance etc..

5.25 How can use of domestic and international internet bandwidth be segregated? Will it have direct impact on broadband affordability?

5.26 What steps should be taken to bring down the cost of international internet bandwidth in India?

5.27 How can competition be enhanced in the international bandwidth sector?

Transparency, Competition and Regulation.

5.28 QoS of broadband, availability of bandwidth, adherence to given contention ratio, affordability, availability and spread are some intricately linked parameters. In your opinion what should be done to ensure good quality broadband to subscribers?

5.29 Do you think that bad quality of broadband connection is impacting the performance of bandwidth hungry applications and hence crippling broadband growth? If so, please suggest remedial actions.

5.30 Is there a need to define new/redefine existing quality of service parameters considering future

bandwidth hungry applications, time sensitivity of applications and user expectation? What should such parameters including their suggestive value and should such parameters be mandated?

- 5.31 What measures do you propose to make Customer Premises Equipment affordable for common masses? Elaborate your reply giving various options?

Establish easy accessibility and affordability to internet devices like PC, laptops, net books, mobile internet devices and other BB enabled devices. This can be enabled by eliminating or minimizing tax on internet access devices, such as computers, net books, mobile internet devices, etc. Reducing the taxes and duties on these devices to 'Zero' will help affordability.

- 5.32 What measures are required to encourage development of content in Indian Vernacular language?

Mentioned above.

- 5.33 Do You perceive need for any regulatory or licensing change to boost broadband penetration?

No

- 5.34 Are there any specific competition and market related issues that hindering growth of broadband?

No.

5.35 What other fiscal/non-fiscal measures should be considered to boost broadband penetration?

Mentioned above.

Dr. Kashyapnath,  
President  
Consumer Protection Association  
Himmatnagar  
Dist. Sabarkantha  
Gujarat