

Comments from Aircel on Consultation Paper on National Broadband Plan

Issues for Consultation:

Q1. Is there a need to define fixed and mobile broadband separately? If yes, what should be important considerations for finalizing new definitions?

Yes, there is a need to define fixed & mobile broadband separately. Since the technology used in Mobile & FL broadband is different so the performance expectations should also be different.

Important considerations for finalizing broadband definition are:

1. Always on connectivity
2. Connectivity Speed
3. Transmission Medium
4. Contention ratio
5. Round trip delay/Ping response
6. Connectivity speed should be defined based upon availability & location of the content.

Q2. Is present broadband definition too conservative to support bandwidth intensive applications? If so, what should be the minimum speed of broadband connection?

Yes. Minimum speed of broadband connection for fixed technology should be 1mb & for mobile technology it should be 256 Kbps.

Q3. What network topology do you perceive to support high speed broadband using evolving wireless technologies?

There cannot be one specific network topology. It would be a mixed of all the topologies discussed in the paper, where there would be access, aggregation & core network nodes from which the internet would be delivered /distributed.

Q4. What actions are required to ensure optimal utilization of existing copper network used to provide wire line telephone connections?

In order to ensure optimal utilization of existing copper, we propose last mile unbundling, which should be open to other private operators on lease basis.

Q5. What specific steps do you feel will ease grant of speedy ROW permission and ensure availability of ROW at affordable cost?

There should be national infrastructural policy document which should include the minimum ROW charges & the timelines for granting ROW. Or, Government/Municipal corporations should lay ducts & lease it out to operators on a monthly charge. This will not only lead to speedy ROW permissions but will also result in capex reduction for operators.

Q6. 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?

Current broadband charges are market driven & based on current available infrastructure. With WIMAX & 3G rollout, these rates are expected to come down. Further, availability of proper broadband infrastructure plan supported by government funds will lead to reduction in cost for operators & finally reduction in broadband cost to customers & increase in broadband penetration.

Q7. Do you think simple and flat monthly broadband tariff plans will enhance broadband acceptability and usage?

There needs to be some cap on the data download so we suggest that we should continue with the current tariff composition of fixed & variable cost.

Q8. Should broadband tariff be regulated in view of low competition in this sector as present?

No.

Q9. What should be the basis for calculation of tariff for broadband, if it is to be regulated?

As answered above

Q10. How can utilization of International Internet bandwidth be made more efficient in present situation?

Utilization of international internet bandwidth can be made more efficient by providing access of cable landing stations at affordable cost & by providing access of international internet bandwidth to all ISPs.

Q11. How can use of domestic and international internet bandwidth be segregated? Will it have direct impact on broadband affordability? If so, quantify the likely impact.

Domestic & international internet bandwidth can be segregated if there is a direct Interconnect made between all the ISPs which should be mandatory.

Another way of implementing is through nixie. Big operators should have sufficient bandwidth available on the nixie so that domestic traffic gets exchanged at nixie.

We anticipate that at least 20% of traffic can be exchanged domestically.

Q12. What steps should be taken to bring down the cost of international internet bandwidth in India?

If the international internet bandwidth access is available to all ISPs, cost of international internet bandwidth will come down.

Further the access to cable landing stations & submarine cable capacity should also be opened at affordable cost

Government on its own should invest in the submarine cable capacities & lease it out to operators. This will also lead to drop in international internet bandwidth cost.

Q13. How can competition be enhanced in the International bandwidth sector?

Government should lay the national internet backbone & provide it on lease to other operators.

The data centers where the internet content is hosted should be operator neutral & access to these data centers should be provided on a non biased basis.

The Tier 1 ISPs across the globe should be allowed to set up their internet pops in all tier 1 cities in India. Government should encourage infrastructural development for setting such pops in India.

Q14. 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?

We believe that as more & more local content is developed & available to end users, there would be more control on QOS parameters. The quality of service is related to customer experience, which can be improved by increasing & delivering content as per customer expectations.

Q15. Do you think that bad quality of broadband connection is impacting the performance of bandwidth hungry applications and hence crippling the broadband growth? If so, please suggest remedial actions.

Right now we are struggling to create an infrastructure backbone for broadband. Current quality of broadband is based on non availability on proper infrastructure. Once that is in place, there would be better quality & rates available to end customer.

Q16. 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 be such parameters including their suggestive value and should such parameters be mandated?

Yes, there is a need to redefine existing QoS parameters.

Cap on contention ratios for retail broadband should be fixed at 1:10 & for dedicated lease line it should be fixed at 1:2.

Round trip delay/latency to various regions like Europe, US east, US west, Middle-east, APAC, & within India should be fixed.

Q17. What measures do you propose to make Customer Premises Equipment affordable for common masses? Elaborate your reply giving various options.

Government should use USOF, 3G & WIMAX funds to provide subsidy to operators for reducing the CPE cost.

Q18. What measures are required to encourage development of content in Indian vernacular languages?

There should be a content policy in which incentive should be given to content providers to provide content in India & to telecom operators who partner with content providers to develop content in Indian vernacular languages.

Q19. Do you perceive need for any regulatory or licensing change to boost broadband penetration?

Yes, Infrastructure sharing to ISPs to be allowed. Government should come out with detailed policy on lawful intercept & monitoring of internet content & it should be the responsibility of cable landing station operator to adhere to it. For monitoring of domestic traffic exchange, government should install facilities.

Q20. Are there any specific competitions and market related issues that are hindering growth of broadband?

If we look at the current broadband customer base, majority market share is with 2-3 operators. This reflects that there is a need to increase competition in this sector. Government should work on laying the national internet backbone & provide it on lease to other operators to increase competition.

Q21. What other fiscal/non-fiscal measures should be considered to boost broadband penetration?

Subsidy/incentives should be given to operators to develop content & provide CPE at affordable cost. Further by laying the national internet backbone infrastructure & leasing it out to all operators, government will not only boost competition but will also increase broadband penetration.

Q22. Does the broadband sector lack competition? If so, how can competition be enhanced in broadband sector?

Yes, If we look at the current broadband customer base, majority market share is with 2-3 operators. This reflects that there is a need to increase competition in this sector. Subsidy/incentives should be given to operators to develop content & provide CPE at affordable cost. to increase competition. Government should work on laying the national internet backbone & provide it on lease to other operators to increase competition.

Q23. Do you see prominent role for fibre 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?

The fibre based technology in the access network may be possible only in top 5-10 cities. Funds from USOF, 3G, WIMAX or other government funds can be used to extend fibre coverage in other areas.

Q24. What changes do you perceive in existing licensing and regulatory framework to encourage Cable TV operators to upgrade their networks to provide broadband?

Q25. Is non-availability of optical fibre from districts/cities to villages one of the bottlenecks for effective backhaul connectivity and impacts roll out of broadband services in rural areas?

Yes

Q26. If so, is there a need to create national optical fibre network extending upto villages?

Yes

Q27. 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

Q28. Among the various options discussed in, what framework do you suggest for National Fibre Agency for creating optical fibre network extending upto village level and why?

There should be a central monitoring agency for project implementation, single window clearance within various government agencies.

Q29. 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?

Autonomous body should be formed with no political interference to plan & execute such optical fibre network. If the project is handled by this independent body, we think the project can be completed between 5-8 years.

Q30. What should be done to increase broadband demand?

We feel that once there is sufficient backbone infrastructure which is open to other operators to roll out broadband services & if there is relevant content available, demand for broadband will automatically increase.

Q31. What, according to you, will improve the perceived utility of broadband among the masses?

So far the broadband is perceived as access to internet, with relevant content availability, it would be seen as a tool to access other facilities also like – e medical, e commerce, e education, IPTV etc.

Q32. What measures should be taken to enhance the availability of useful applications for broadband?

Shortcut to specific applications can be developed.

Q33. How can broadband be made more consumer friendly especially to those having limited knowledge of English and computer?

By developing local language web page & by having rural internet operators (under rural schemes) to help people learn & understand the use of broadband applications in their normal life, will increase knowledge of broadband.

Q.34 Do you agree with projected broadband growth pattern and futuristic bandwidth requirements?

Yes

Q35. 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. Government should lay the national internet backbone & provide it on lease to other operators.

The data centers where the internet content is hosted should be operator neutral & access to these data centers should be provided on a non biased basis.

The Tier 1 ISPs across the globe should be allowed to set up their internet pops in all tier 1 cities in India. Government should encourage infrastructural development for setting such pops in India.