

ADITYA BIRLA



IDEA Cellular

07th Feb, 2011

**The Secretary,
Telecom Regulatory Authority of India
Mahanagar Door Sanchar Bhawan
Jawahar Lal Nehru Marg (Old Minto Road)
New Delhi - 110 002**

Kind Attention: Principal Advisor (TD)

**Sub. : Consultation Paper on issues related to Telecommunications Infrastructure
Policy**

Dear Sir,

At the outset we would like to submit that IDEA Cellular welcomes the initiative of the Authority to invite views on issues related to Telecommunications Infrastructure Policy. The Authority in its Consultation paper has correctly noted that a robust telecom infrastructure is indispensable for providing reliable services to the telecom consumers. Though Infrastructure is key to growth of telecom in the Country, the telecom sector faces multiple hurdles, various policy impediments and multiple levies which inhibit expansion of telecom infrastructure in the country.

It is essential therefore that the Country have a uniform policy applicable across all states with the objective to encourage establishment of telecom infrastructure. This uniform or a common "Telecommunications Infrastructure policy" should cover the following key aspects:

- a) "Telecommunications Infrastructure policy" should lay down uniform guidelines across states for provision of the essential Right of Way (RoW) to telecom service providers in a fast track manner.
- b) Right of Way (RoW) guidelines should enable speedy acquisition of sites with minimum costs for the service provider.
- c) Right of Way (RoW) guidelines should encourage sharing of infrastructure and IBS solutions. The RoW charges could be prescribed at a lower rate in case the facility/ telecom infrastructure is proposed to be shared.



Idea Cellular Ltd -Regulatory & Corporate Affairs Office
1005-6, Kailash Building, 26, K.G. Marg,
New Delhi-110 001
Registered Office : Suman Tower, Plot No. 18,
Sector-11, Gandhinagar - 382 011

Telephone +91 11 2373 0133
+91 99114 40133
Fax +91 11 2373 0135

Website www.ideacellular.com

- d) State Governments should ensure that service providers do not face any problems/ hurdles in obtaining a "No Objection Certificate" (NOC) from various Local Authorities.
- e) Every state should endeavor to provide reliable uninterrupted power supply to the service providers at concessional rate; at par with agriculture sector.
- f) The Policy should clearly discourage localized levies of any nature. Further, it should lay emphasis on lowering of entry barriers for potential subscribers in rural areas, by way of a reduction in duties / sales tax on Handsets.

Our comments to the issues raised in the Consultation paper are as follows:

Overview of Telecom Infrastructure

6.1 Do you agree with the classification of infrastructure elements described in this chapter? Please indicate additions/modifications, if any, particularly where you feel that policy interventions are required.

IDEA's Response:

We are in general agreement with the classification of the Infrastructure elements.

6.2 What measures can be taken to encourage more ILDOs and ISPs to set up cable landing stations?

IDEA's Response:

It may be noted that TRAI Regulation on "Access to Essential Facilities at Cable Landing Stations (CLS)" issued in 2005/6 and the mandatory publication of RIO has ensured eradication of monopoly practices of incumbents and provided the groundwork for open access to International Cable Systems such as SMW4 etc. However, we feel that further policy interventions are needed to ensure open, non-discriminatory and cost-effective access to Cable Landing Stations (CLS) on International Cable Systems, as given below.

We recommend the following measures related to Cable Landing Stations:

1. Need for Neutral Cable Landing Stations on consortium based International Cable Systems:

Consortium based International Cable Systems such as SMW4, IMEWE, EIG present a unique problem. The physical CLS is set up normally by the Indian Consortium member. However, Indian ILDOs and ISPs are at liberty to purchase International capacities from any International Cable System regardless of its nationality. This creates an inherent conflict and quasi-monopolistic situation, where the India consortium member controls the physical CLS and is also one of the competitors selling capacities on the Cable System. Thus for example, on SMW4, India consortium members compete with other International carriers who are consortium members on SMW4.

We feel that this inherent conflict may be resolved by making it mandatory to have neutral physical CLS on each of the International Cable Systems. Further, there should be provisions to regulate the pricing of the CLS RIO to make them cost-based and in tune with the trends in International tariffs.

In fact, if possible, our recommendation is to set up a complete Carrier Neutral Cable Landing Station. This can be operated by an independent licensed entity that can be provided cost plus based compensation to operate the Landing Station. All the International Cable Landing Systems in India should mandatorily terminate into this Carrier Neutral Landing Station. Such arrangement shall ensure non-discriminatory and low cost access to all the International Cable Systems in India.

2. Policy interventions needed on RIO pricing:

While the TRAI mandated RIO publication has ensured fair practices, there is a pressing need for regularizing the practice of periodic review of RIO pricing by TRAI on Quarterly or Half-yearly basis. This is most pertinent in view of the constantly changing International Bandwidth prices.

As an example, internationally, there is a norm that STM4 prices are 2.5 times those of STM1 prices, while STM16 prices are 2.6 times those of STM4 prices. However, on factoring the details from the published RIO of a few service providers, the STM4 prices work out to nearly 4 times STM1 prices, while the STM16 prices work out to nearly 4 times STM4 prices. This means that for the STM16 level, any Seeker needs to pay ~Rs70 Lacs per annum (16 times the STM1 price of ~Rs4.5 Lacs p.a.)!

At the same time, there is also a need to review the prevailing pricing of Rs 4.5 Lacs p.a. for STM1, as this price has remained unchanged over the last 4 years, in spite of the steep fall in International Bandwidth prices by a factor 4 - 6 over this period. It is pertinent to note here that the International Bandwidth use in India has also increased manifold during this period. Further, with the launch of 3G services and increase in Broadband penetration, the International Bandwidth volumes out of India may have crossed 1 Tbps and would touch multiple Tbps in a short period. The unreasonably high and linear RIO pricing in that scenario will make the end user pricing of International Bandwidth in India abnormally high.

We thus strongly recommend immediate review of RIO pricing with a review on a periodic basis to make it cost-based.

Internet Exchange Point

6.3 Do you perceive the need for effective Internet exchange point(s) in the country to efficiently route domestic IP traffic?

IDEA's Response:

Yes. There is a very urgent need to set up effective Internet Exchange Points in India for cost-effective and low-latency routing of domestic traffic.

6.4 If your answer to issue in 6.3 is in affirmative, please comment on the licensing framework of the entities for setting up Internet Exchange Points in India.

IDEA's Response:

While NIXI has been an important initiative, there is a need to provide a firm regulatory and legal framework to ensure that the larger ISPs and Content holders are compelled to provide all routes at the Internet Exchange Points.

Off-late there has been an increasing shift of content to India with the growth in Internet usage in India. As a result, Companies like Google, Yahoo, etc, have their servers hosted in India and others are also following suite gradually. However, this development calls for enabling regulatory measures that ensure that Domestic Peering is mandatory and all the traffic in India is compulsorily advertised on IEPs.

It should be noted here that Google/ Rediff allow Private Peering in India on bi-directional basis on non-chargeable basis. This sets the benchmark for Domestic Peering pricing – that is free!

Some of the recommendations related to the regulatory framework of Internet Exchange points (referred to as IEP below) are as mentioned below:

- a) NIXI (or whichever IEP) should be under the regulatory purview.
- b) They can thus be licensed entities or entities with public / private participation. .
- c) The IEP should have regulatory powers/ provisions to ensure that all ISPs/ Content Providers (such as Google/ Yahoo/ Microsoft or any others) advertise all their routes on all the IEP locations nationally (not regionally). This will ensure not only reduced pricing, but also higher user experience due to lower latency and faster response times.
- d) The IEP should be a neutral body and should only charge cost-based tariffs for domestic data exchange.
- e) Content Providers (Google/ Indiatimes/ Yahoo etc) are either hosted with Third Party Data Centres or Captive Data Centres. It should be made mandatory for all Content Providers to provide free private peering to any licensed ISP. The cost of the domestic leased circuit to reach the Content Provider locations can be borne by the ISP.

6.5 Will it be desirable to permit those Unified licenses to setup IP exchange points in the country who have no vested interest in routing of the IP traffic?

IDEA's Response:

As we have pointed out above, the IEPs should be neutral and should have adequate regulatory powers/ supervision. They should have no vested interest in routing of IP traffic in India. They should ensure least cost access to domestic routes and traffic and can be licensed entities or entities with public / private participation

Private peering with ISPs should be made mandatory for Content Providers, especially larger Content providers such as Google etc. Such private peering should be free bi-directionally in line with the model followed by Google / Rediff in India. Such private peering for Content providers may happen through the IEPs to avoid very large number of bilateral Private Peering points. However, data exchanged for private peering should be non-chargeable even if done through IEP.

Mobile Virtual Network Operator

6.6 Please give your comments on the changes proposed in para 3.5 of Section C of Chapter 3.

IDEA's Response

Though there are no clear Government policies with respect to MVNOs, innovation in service offerings through MVNO can be permitted. However, MVNO should not be allocated any spectrum since optimal use is paramount.

In- Building Solutions

6.7 What methods would you propose for reduction of the number of towers?

&

6.8 In what ways do you think that IBS can be encouraged for better in building coverage, better QoS and reduction in level of radiated power from Macro cell sites?

&

6.9 How can sharing of IBS among service providers be encouraged? Does TRAI need to issue any guidelines in this regard?

&

Distributed Antennae Systems

6.10 Do you agree that innovative technologies such as 'Distributed Antenna System' (DAS) can be effectively utilized to reduce number of towers and migrate towards tower-less cities?

&

6.11 What are the impediments in adoption of new technologies such as DAS and how can these be removed?

IDEA's Response to 6.7/6.8/6.9/6.10 & 6.11

- a) We believe that IBS and DAS are a step forward in the endeavor to reducing the number of towers and should be encouraged to a great extent. However, there should not be any regulatory mandate to deploy these technologies and the market forces should be allowed to prevail.
- b) Further we would like to submit that the license does not stipulate the use of any specific network architecture and is technology neutral, and the operator has complete freedom of choice with respect to using any architecture as per his suitability. Hence there already does not exist any case of a regulatory mandate for the operators to deploy these technologies.
- c) While Incentives the form of reduction / removal of custom duties, exercise duties, tax benefits etc. should be offered to the operators to encourage adoption of these technologies, emphasis needs to be kept on ROW permissions.
- d) OFC connectivity in Urban areas is critical. Though OFC Is currently in place gaps exist. In this regard a provision in the JNURRM and the building design must be

made to include the parameters for including the data connectivity i.e OFC, and suitable ducting in the construction of all new infrastructure viz roads, ports, airports and residential constructions.

Standardization of Tower Design

6.12 Would you agree that the design of towers can and should be standardized?

&

6.13 If yes, how many different types of towers need to be standardized?

&

6.14 What are the important specifications that need to be included in these standards?

&

6.15 Which is the best Agency to standardize the tower design?

IDEA's Response on 6.12/6.13/6.14/6.15

- a) Tower Designing requires consideration of factors like Antenna load, Wind, Safety, Risk Coefficient, Sway/Twist and need for Microwave connectivity. For Example, in the absence of the need to have microwave connectivity, the tower height could be kept lower. Hence, tower designing invariably requires consideration of all local factors to arrive at the optimally-suitable design. In view of the same, we recommend that tower-designing be best left to the judgment of the experts involved and no standardization be mandated.
- b) Further, we believe that the existing framework for the tower design is working well and there has been no cases reported for the aberrations. Therefore we believe that the present mechanism is adequate and should be continued.
- c) Any design that is the aesthetically good improves infrastructure sharing and reduces capex for the operators should be encouraged.
- d) IIT Madras, SERC, the relevant department in the all other IITs can also be considered to ensure geographical presence in different parts of the nation, and distribution of load for faster response.

Reducing Visual Impact of Towers

6.16 What is the likely cost of camouflaging the towers?

&

6.17 Can camouflaging be made mandatory? If so, can this be made part of the design standards of the towers?

IDEA's Response on 6.16/6.17

- a) We feel camouflaging needs to be encouraged and promoted, however the same should not be mandated due to the high additional capital expenditure.

- b) Government should provide incentives / subsidy to the licensees in order to encourage them to adopt camouflaging of towers.
- c) We also feel that it might be more viable to limit its use in CBD / key locations in dense urban cities.

Clearances From Local Authorities

6.18 Do you consider that the existing framework of different civic authorities to grant permission for telecom towers is adequate and supportive for growth of telecom infrastructure?

&

6.19 Is there a need to set-up a single agency for approval and certification of towers? Is there an existing agency that can do this work? If a new agency is proposed, what should be its composition and framework?

&

6.20 Is it feasible to have a uniform framework of guidelines including registration charges, time frame, single window clearance etc for granting permission for installation of telecom towers and laying of optical fibre cables? If so, can it be prescribed by the Licensor or the Regulator?

&

6.21 What can be an appropriate time frame for grant of permission for erection of tower

&

6.22 How can a level playing field be ensured for telecom service providers vis-à-vis other utility service providers especially in reference to tower erection?

&

6.23 Which agency is best suited to inspect the buildings and certify the structural strength of the buildings in case of roof based towers?

IDEA's Response on 6.18/6.19/6.20/6.21/6.22 & 6.23

- a) We believe the existing framework is not adequately supportive and there is a need for taking a holistic view on the issues involved.
- b) It is submitted that telegraphs, telephone, wireless and other forms of communications are Central subject. Entry 31 of List-I , Union List of Schedule Seven of Constitution of India reads as under:-
"Posts and telegraphs; telephones, wireless, broadcasting and other like forms of communication."

Further, Entry 96 of List-I reads as under:-

"Fees in respect of any of the matters in this List, but not including fees taken in any court."

In view of the above, the framework / guidelines issued by the Central Government should be uniformly followed by the State Governments and local Municipal Bodies.

- c) There is no need for any new agency to handle Telecom Infrastructure clearances. The existing structure, departments and resources in the Local Administration Departments of the State Governments are good enough to handle the present requirements. However, what is required are clear guidelines explaining how to process the request for a Telecom Site which includes tower construction as well. Once the Standards have been made available all that would be required by the Local officials would be to ensure that the standards were being complied with. Hence, as already submitted, there is a need for uniform standards, uniform Checklists and a uniform process for handling telecom site construction requests, that are applicable across the nation and binding for all the Local Administration Departments in all States, be it Metros, Corporations, Municipalities or Panchayats.
- e) Single Window clearance is not desirable, Telecom sites development take place across the geographical locations and to ensure compliance of the regulatory guidelines the approving officials should be near to the construction sites as far as possible, single window clearance will result in unsupervised installations because of ownership conflicts. With the enactment of a uniform regulatory framework applicable across the nation, Local Administration Departments should be entrusted to grant NOC and ensure compliance also.
- d) The local bodies should grant the permission for setting up of the towers within 30 days of the request through a fully completed application. In the absence of any communications from local bodies, it would be considered to be deemed approved.
- f) Telecom Infrastructure should be categorized under basic Infrastructure category such as Roads, Bridges, etc. Power connections to the Telecom Sites should be allowed based on the NOC from Local Administration Authority. Telecom Sites should be provided with power tariff equivalent to the one offered to Basic Infrastructure establishments. Further, regulatory protection should be allowed to Telecom Assets at par with Governmental Infrastructure Assets like Railways by enacting law for severe punishment for theft, damages, etc to Telecom Sites
- g) Lastly, the accountability for ensuring the safety of the structures should be left to the companies only with penal clauses in the standard guidelines instead of giving it to a third party. The Tower owner should be responsible for the due diligence of the building strength, structural stability of the building and the tower or any other compliance as specified by the Regulator

Infrastructure sharing

6.24 Should sharing of mobile towers be mandated?

&

6.25 Should sharing of active infrastructure, created by themselves or infrastructure providers, be allowed?

IDEA's Response on 6.24 to 6.25

- a) We feel that though sharing of towers is beneficial and should be encouraged, it should not be mandated and should be left to the discretion of the operators as each operator would have their own requirement strategy. Given the already existing competitive environment there is adequate incentive for operators to share towers and the market forces are already taking this into account. Rather than mandating infrastructure sharing, incentives should be offered for achieving & increasing higher Tenancy Ratios.
- b) Further we believe that the sharing of the active infrastructure should be extended to the core network also.

Use of USO for rural areas

6.26 Please comment on the issues raised in paragraph 5.6 of Section A of Chapter 5.

IDEA's Response

Over the years, operators have contributed to USO funds helping build up a current total corpus of over Rs. 20,000 Cr burgeoning @Rs 6,000 Cr every year. However, paradoxically, the USO Fund has ended up impeding universal service as against its target of facilitating one. Currently, under the USF scheme on mobile services there are more than 7,000 towers that are already installed. However lack of basic infrastructure, such as power, etc has severely impeded optimal utilization of these sites due to recurrent uptime issues. A case in point is the MP USF sites where the Infrastructure provider, largely BSNL, has a site downtime of more than 20% resulting in high customer dissatisfaction and churn for the service providers. This also results in a competitive disadvantage for the USF access participants since independent roll-outs are found to be much more effective. It is therefore extremely important that we use the lessons from the past to evolve a transparent and efficient equal opportunity model.

Under this futuristic model the USF subsidy support should be open for all participants as against the bidding models with limited participants that often result in restricting serious participants. At the same time it needs to be ensured that there is a corresponding latch on timely roll-outs, so that the speed of the program does not suffer. Further, we also feel that the USO fund with its robust balance at over Rs 20,000 crore currently has enough finances to support all future rollout initiatives, and hence collections of further payments under USF should be stopped immediately with an understanding to re-start it later, if required.

Since wireless has already revolutionized the telecom landscape of this country, we strongly suggest that wireless broadband platforms should be made central to meeting national broadband goals especially in reaching under-served rural and remote areas. Further, USO should ensure that the subsidy is used for delivering local access deployment and support efficient backhaul. It is our belief that significant broadband coverage can be achieved in the near future by offering suitable incentives and subsidies to UASL operators as they are already best positioned to spread broadband at shorter intervals compared to any other model. However, to ensure a level playing field for all participants, the USO support should be technology neutral and should be offered on the basis of the contribution made to the growth of broadband services in the rural areas, not to mention the need to ensure that it is based on transparent principles. Once

these basic requirements are taken care of, we are confident that competitive roll-outs would happen in the least possible timeframe.

IPV6

6.27 What measures are required to encourage the deployment and adoption of IPv6 in the country?

IDEA's Response:

We are of the view that the Government should mandate usage of IPv6 in the platforms/applications pertaining to e-governance, m-governance and IPv6 compatibility in its own procurement of IT systems and networks. It should also organize workshops and seminars to bring awareness about IPv6 and its benefits for service providers and end-users community.

6.28 In your opinion, what should be the timeframe for migration to IPv6 in the country?

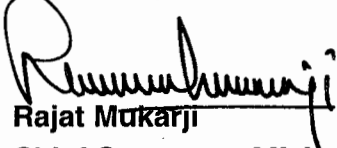
IDEA's Respons:

We feel there is need to develop a strategy to support a transitional period between IPv4 and IPv6 while pursuing international co-operation and monitoring IPv6 deployment under the supervision of IPv6 Implementation Group (IPIG). A detailed migration plan can be formulated for the same.

We earnestly believe that the Authority will give due-consideration to our aforementioned comments before formalizing any guidelines on the issue of Telecom infrastructure.

Yours faithfully,

For IDEA Cellular Limited.



Rajat Mukarji

Chief Corporate Affairs Officer