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Shri Sunil Kumar Singhal
Advisor

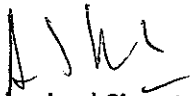
Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhawan,
Jawaharlal Nehru Marg,
New Delhi-110002

Subject: Comments on Consultation Paper on Inputs for Formulation of National Telecom Policy 2018

Dear Sir,

Please find enclosed herewith the comments of Reliance Communications limited on the Consultation Paper on Inputs for Formulation of National Telecom Policy 2018 for your kind consideration

With Regards,
For **Reliance Communications Limited**


(Authorized Signatory)

Please reply to: Amit Mathur
Executive Sr. Vice President
Fax: 011- 3033 1781

Reliance Communications Limited's Response to the Consultation Paper on Inputs for Formulation of National Telecom Policy 2018

Vision Statement:

To provide secure, reliable, affordable and high quality data Centric telecommunication services to enable India moving towards Data society to reach out the benefits of development to every Indian.

Executive Summary

Data has become the prime mover in India and NTP 2018 should be an enabler for India moving to Data society to help reach out the benefits of development to every Indian. Accordingly the NTP 2018 should address the below

- I. IT parks to be declared as Infrastructure and added in the Harmonized list of Infrastructure sub sectors. IT parks will play a crucial part in creating the Digital infrastructure including content.
- II. Ensure uniform encryption policy at the national level with adoption of internationally proven encryption algorithms, such as a) DES 56 bits, (b) 3DES 128 bits and (c) AES 256 bits.
- III. Local hosting of all India originated and India served content should be mandatory. Security of the Indian content is critical in today scenario. A mail generated in India on say Gmail / Yahoo or document created on Google apps should be hosted in India only to ensure security. Countries like China have mandated local storage. Even Apple has agreed to host and store iCloud content of local users in servers in China itself.
- IV. To enable local hosting -
 - It is essential to ensure availability of reliable and low cost power for the Data Centers.
 - Providing Tax holidays for the companies that deliver digital content or services through Servers based in India.
- V. Forward looking and enabling policies should be put into place to make India an attractive location for hosting and providing Cloud services to the World.
- VI. Data Centers in Special Economic Zones (SEZ) to get the same tax benefits as provided to other units in the SEZ. The content hosted in these SEZ's should not be under the purview of Indian IT Act.

- VII. In order to promote Wireline technologies in access networks unbundling of last mile should be mandated. In countries like UK where it has been implemented, it has facilitated the growth of true broadband with speeds going upto 100MBps to the home.
- VIII. Regulatory framework of M2M/IOT needs to be put into place with light touch regulation of only registration for M2M / IOT providers.

Detailed Response

1. Encryption -

Security of the data travelling over the networks is paramount for each user in today's environment. With increasing use of data networks in everyday activities, the data flowing on the networks carry critical and confidential information which needs to be protected. For ensuring uniformity of encryption policy at the national level there is a need to ensure that a single entity prescribes standardized encryption levels for attaining uniformity across services in India.

The encryption policies enunciated by various sector regulators are at variance, as listed below, and there is a teething need to align the same to a single national policy.

- a. The Information Technology Act 2000 provides for prescribing modes or methods for encryption (Section 84A) and for decryption (Section 69).
- b. SEBI - Guidelines on Internet Trading
 - i) Mandates the use of 64 bit / 128 bit encryption for network security.
 - ii) Recommends 128 bit encryption for both WAP based securities trading and internet based securities trading.
- c. RBI - Guidelines on Internet Banking. Mandates the use of SSL / 128 bit encryption as minimum level of security for Banks & banking transactions.
- d. DoT – Guidelines for Licensees
 - i. Mandates evaluation and approval of encryption equipment.
 - ii. Prohibits bulk encryption.

iii. Level of Encryption limited by DOT to 40 bit key length.

iv. For higher level encryption, DoT mandates seeking of written permission and deposition of Decryption Keys with them.

The dichotomy of these regulations is that on one hand the IT Act, 2000 stipulates adoption of internationally proven encryption techniques where as at the same time DoTs insistence on 40-bit encryption is outdated and poses major security risks. In this era of high speed computing devices, such instructions tend to be inconsistent with the International Standards and best practices.

Our Recommendation is to include in the policy an objective for ensuring uniform encryption policy at the national level for which,

- i. A single entity prescribes standardized encryption levels for attaining uniformity across services in India.**
- ii. Internationally proven encryption algorithms, such as a) DES 56 bits, (b) 3DES 128 bits and (c) AES 256 bits are adopted in India in consonance with the IT Act, 2000.**

2. Data centre and Local Hosting

- a. Data has become the prime mover in India and NTP 2018 should be an enabler for India moving to Data society to help reach out the benefits of development to every Indian. Apart from ensuring Broadband proliferation and mushrooming of local IXPs another major benefit that accrues from hosting content locally is that ISPs can limit the need to purchase costly international bandwidth which is the biggest operational expense in an ISPs costing. This in turn shall enable ISPs to offer better broadband services at affordable prices.

The Content Hosting Services costs are on account of (i) Real Estate i.e space for developing a Data Center, (ii) Power for IT systems and environmental conditioning purposes and (iii) Physical Security of the IT systems such as Servers, Storage and networking equipment.

It is the relatively higher costs of the first two components of Capex that has prevented evolution of attractive business case(s) for the international / domestic community to host content in India.

In an Internet Data Centre, Power is the most critical cost element which due to its high costs makes hosting of content unviable in India as compare to developed countries across the Globe. Concerted efforts at

providing power subsidy to Internet Data Centers will help transfer the benefits for hosting services facilities thus making it lucrative for them to Invest in India.

- b. Tax holidays for content provider hosted in Indian data centers.
The government should look at providing Tax holidays for the companies that deliver digital content or services through Servers based in India. Policies for establishing Data Centers in special zones, like the STPs, shall go a long way in attracting content hosting in India. E.g. In US Virgin Islands, companies can save up to 90% on their Federal & State Taxes that too for a period of 15 years. Certain other countries which offer such tax benefits are Switzerland, Ireland, Singapore etc.

Our Recommendation is to include in the policy an objective to promote local hosting of content by,

- i) **Local hosting of all India originated and India served content should be mandatory. Security of the Indian content is critical in today scenario. A mail generated in India on say Gmail / Yahoo or document created on Google apps should be hosted in India only to ensure security. Countries like China have mandated local storage. Even Apple has agreed to host and store iCloud content of local users in servers in China itself**
- ii) **Ensuring availability of reliable and low cost power for the Data Centers.**
- iii) **Providing Tax holidays for the companies that deliver digital content or services through Servers based in India**
- iv) **Data Centers in Special Economic Zones (SEZ) to get the same tax benefits as provided to other units in the SEZ. The content hosted in these SEZ's should not be under the purview of Indian IT Act**

3. IT Park

Telecom infrastructure is already part of the harmonized list of infrastructure sub sectors. In current scenario with move to digital era it is essential that the infrastructure required for creation of digital services and content is provided adequate support. IT parks will play a crucial role in creating the Digital infrastructure including contents. IT parks should be declared as Infrastructure and added in the Harmonized list of Infrastructure sub sectors.

Our Recommendation to include in the policy an objective to promote IT park-

IT parks to be declared as Infrastructure and added in the Harmonized list of Infrastructure sub sectors.

4. Cloud Services -

Forward looking and enabling policies should be put into place to make India an attractive location for hosting and providing Cloud services to the World.

5. Unbundling of local loop -

The following need to be incorporated in the objectives of the policy to promote wireline technologies in access networks.

In order to promote Wireline technologies in access networks unbundling of last mile should be mandated. In countries like UK where it has been implemented, it has facilitated the growth of true broadband with speeds going upto 100MBps to the home.

6. M2M / IOT -

The M2M systems are gaining traction day by day due to the opportunity offered by the ubiquitous availability of network, wire line as well as wireless or through a combination of the two, incremental data speeds over these networks coupled with decreasing prices of communication and the reasonable affordability of the embedded modules. M2M sector shall be the harbinger of opportunities to bring connectivity and intelligence to machines, sensors, and other devices. The policy should be light touch basis, flexible with no hard regulations enabling global interfacing and seamless flow of data and n/w, cross-border

The following need to be incorporated in the objectives of the policy to promote M2M ecosystem

Regulatory framework of M2M/IOT needs to be put into place with light touch regulation of only registration for M2M / IOT providers.