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**Sub:** Comments/Counter Comments – reg.

Ref: Consultation Paper on Green Telecommunications, dated 3rd Feb 2011

To, Sh. Lav Gupta, Principal Advisor (TD) Telecom Regulatory Authority of India, New Delhi

## The Comments/Counter comments w.r.t "Green Telecom" is as follows:

"Green" w.r.t energy is not only related to TELECOM.

- In normal domestic community viz., Gated community/apartments/household/etc. as well with other
  industries, they are using alternate power supply (ex: backup Generators) and this is increasing
  day by day in multifold.
- So, in total, at the **supply chain of these Generators**, i.e. at manufacturing level there should be support from Govt.
- Because our aim is to minimize the GHG release from alternate energy sources, such as using Diesel Generators (or due usage of 2/4 wheelers).
- Usage/manufacturing of Green-Energy is to be dealt by concerned ministry because "Green" concept mere is not related to telecom industry as explained. Whatever the measures directed through that ministry is to be adopted by the Telecom Industry also, so that uniform mechanism across various sectors' can be possible w.r.t "Green Energy"

Number of Radio Access points will not be reduced mere Tower/passive infrastructure sharing, i.e.:

- Even through tower sharing, only few passive components viz., Iron Tower, Space, Generator, Airconditioning, security, Electricity connection, and battery are going to be shared, but the load on Generator, Electricity, battery will be increased due to the various BTS/media equipments, which are presently not sharable due to constraints in the present policy/practice.
- The radiation effect to human is more if more operators share single tower (please refer Shri. Prof. Girish Kumar's remarks for TRAI consultation paper on "Issues related to Telecom Infrastructure Policy, dated 14th Jan 2011")
- More BTSs/Media equipments means more E-waste will be generated, even after tower sharing whenever there is a technology shift.

The policy may be adopted to share the TRAFFIC instead of few components of tower components. I.e.:

- Number of operators will be having single BTS in a particular strategic location and will be connected to single central equipments.
- But the traffic will be shared / branded and the physical infrastructure (passive +active infrastructure) can be shared on revenue basis.
- I.e. in a particular area, there will be only single set of BTS equipment, media equipment, generator, air-conditioning, battery, etc.
- Basing on the traffic (of all operators) the equipment will be expanded.
- As per the present policy conditions each operator has to procure, install, maintain the necessary infrastructure such as Central Switching systems, Access N/w BTSs, spectrum, etc. separately This is leading to wastage of natural resources & generation of future e-waste when ever there is technology shift. Hence the policy should allow the Physical Infrastructure Operators (active/passive including spectrum) to establish the infrastructure as per the requirements of all the operators and allow the Service Operators to utilize the telecom infrastructure as per the terms of traffic & share of the revenue. This results in reduction of multiple infrastructures as well as optimum utilization of natural resources. For example, Airport Authority Of India, operates the Air Ports and allows all the Airways to utilize the Airports optimally
- If such regulation released, the spared equipments can be diverted to the rest of rural/tribal locations for bridging the digital divide.

## **Reduction of Multiple Infrastructure**, i.e. Reduction of usage of natural resources:

- Present telecom industry scenario is similar to that: If "A" wants to start DTH services, "A" has
  to launch a satellite & maintain it upgrade it. I.e. every telecom operator needs to establish
  their own Central equipments, Radio Access (BTS) equipments, media equipments, inter
  connections, etc. This is to be avoided for future telecom networks.
- Multiple infrastructures (Physical + Active) are to be reduced for sustained "Green Policy" in all sectors including TELECOM. Fine tuning the policy in this direction is required.

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## Management of E-waste & Environmental policy w.r.t Telecom Industry, i.e.:

- Manufacturer / suppliers / service providers are to be made responsible for processing of e-waste generated whenever the equipment becomes absolute due to technology shift or faulty / repair.
- In licensing, suitable clauses are to be included / amended so that, every Service provider / manufacturer / supplier should have an uniform & proved mechanism of handling / collection / processing of e-waste generated through the devises / equipment supplied / used / scrapped.
- In similar lines of mechanism of "handling of medical waste" collecting from hospitals & processing centrally without damaging the environment, every telecom device/equipment manufacturer / dealer / service provider / retailer should have to adopt such system for reducing future e-waste generated threats to the environment.
- The vision is to be in this direction: Every telecom electronic device / equipment is to be collected & processed in a framed pre-defined environment friendly mechanism, for which all telecom related policies / licenses to be amended accordingly.
- Whenever new technology is going to be adopted, Environmental clearance is to be taken to safe guard our country from future environmental threats as well to reduce multiple infrastructure in future / next generation telecom networks/infrastructure or customer premises devices for better "Green Telecom" in our nation.

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