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#### Sub : TSDM Comments on TRAI Consultation on Approach towards Sustainable Telecommunications

Dear Sir,

This has reference to the consultation paper 02/2017 dated 16<sup>th</sup> January, 2017 seeking comments from the stakeholders on some issues raised in the consultation paper.

While Climate change is being recognized as prime concern being faced by the human race in countries across the globe, India is one of the few countries that have adopted green policy for achieving energy efficiency in telecommunications.

In this regard, based on the TRAI recommendations on 'Approach towards Green Telecommunications' issued on 12<sup>th</sup> April 2011, DOT had issued detailed Directives dated 4<sup>th</sup> January 2012 to all telecom service providers for immediate implementation.

It sets clear year wise targets for implementation of hybrid power solution for urban and rural towers i.e., at least 50% of all rural towers and 20% of urban towers are to be powered by hybrid power by 2015. As we understand that the targets as set by DOT (as per directive dated 4<sup>th</sup> Jan 2012) for year 2015 are not met.

It emphasizes that all telecom products/equipment in the telecom network should be energy and performance assessed & certified for "Green Passport" utilizing ECR rating and Energy 'passport' determined by the year 2015. *As we understand same has not yet been implemented and enforced.* 

Further, the directive mandates that the network operators should progressively induct carefully designed and optimized energy efficient radio networks that reduce overall power and energy consumption.

The said directives sets the carbon emission reduction targets for the mobile network to be at least 5% by the year 2012-13, 8% by the year 2014-15, 12% by the year 2016-17 and 17% by the year 2018-19, which are far away from the actual status.

It is apparent that in realty even after about six years of TRAI recommendation and DOT directive not much has been achieved.

It is very disturbing that attempts are being made after five years of the DOT directives to recalibrate those directives especially the RET targets and implementation approach, rather than enforcing the earlier set targets and penalize the defaulter suitably. We would urge TRAI to strongly reflect this in their recommendations.

**REGISTERED OFFICE:** 

TELECOM SYSTEM DESIGN & MANUFACTURERS ASSOCIATION A-11, (Ground Floor), Pamposh Enclave, Greater Kailash - I, New Delhi 110 048, India, Tel. : +91-11- 41042327 Email : admn@tsdm.in,Website :www.tsdm.in We, however, would like to provide our views on some key issues as under:

#### 3.12. Please comment with justification on the approach suggested by the DoT committee.

The most significant point of the approach suggested by RET committee for incorporating RET in telecom network was to incorporate energy efficient products & solutions so as to use RET power to the extent possible in the networks. We strongly endorse this.

With the rapid evolution of technologies, product architectures are evolving to enable highly power efficient product & solutions. There has to be strong policy enforcement to ensure that status-quo is changed and all new deployments are based on such solutions so as to enable operate them in RET power

To achieve the overall year on year reduction in carbon footprint, rather than enforcing new deployments using such power efficient products even the existing networks must be phased out to use the energy efficient solutions. Directive must make it time bound.

The diesel free sites contributing to overall objective of the policy is the right approach.

While suggesting the various methods of energy efficiency, committee has pointed out to use BTS with total power consumption of each BTS not exceeding 500W by the year 2020 for 2+2+2 configuration. In our view, this is a very loose target. As per the rapid technological innovations and competitive supplies, such products are already available in the market including domestic market complying better power efficiency requirements even now. We suggest that target for 2020 shall be made more stringent.

The committee has also suggested use of outdoor distributed antenna system in line with the objective of the national telecom policy to cover the uncovered isolated in-buildings more effectively and power efficiently. Such deployments need to be enforced and facilitated through right policy provisions.

# 3.13. For effective implementation of RET/Energy efficient solutions in telecom sector, how can the industry be supported? Should incentives be provided to licensees (TSPs)? If yes, what should be the milestone? Please comment with justification.

Ans Achieving the desired reduction in carbon emission through the use of Renewable Energy Technologies and energy efficient equipment, is a national objective and in line with India's International commitments.

Government must provide financial support to encourage domestic innovation and development & manufacturing of power efficient telecom products and solutions, as they can play most significant role in enabling running of telecom networks on RET only. Such financial support should only be given to the domestic telecom equipment industry who fully complied with the value addition criteria as defined under the Preferential Market Access policy

As per the consultation paper, the committee recommends a rebate of 1%, 2% and 3% in license fee in the financial year subsequent to installation to licensees (TSPs) which deploy RET solutions in 20%, 35% & 50% of their total BTS's in India respectively,

We suggest that if such incentive are to be provided, they shall be linked with the usage of domestically developed and manufactured product only. This will in turn enable meet the national objective of enhancing make in India and meet the Net Zero import targets as set by Government.

# 3.14. What methodology can be proposed for setting new Renewable energy targets in the telecom sector? What should be the timeframe for achieving these targets? Please comment with justification.

Ans: The technologies are evolving rapidly and optimization of products and solutions is a continuous process. If we keep calibrate and shift the targets, this will be a never ending process and we will never meet the larger national objectives. It has been five years since issuance of DOT directives and we feel there is no serious effort from the service providers part to comply with the directives.

Hence, we strongly recommend that the original timelines as stipulated by DOT vide its directives dated 04.01.2012 should remain unaltered and the defaulters should be suitably penalized and mechanism may be worked out to set and monitor the targets as we move forward.

### 3.9. What are the options available for renewable energy solutions which may be harnessed to their maximum potential to power the telecom sector? Please comment with justification.

Ans: The consultation paper reviews various options available for renewable energy solutions such as Solar Photovoltaic, Wind Power, Fuel Cells, Hybrid Power Systems, Battery Technologies for RET solution etc.

In our view, it is most important for the government to enforce induction of most power efficient, low power systems in the telecom networks, which not only have less carbon footprint but will also require less power to run the systems and will help to run the system solely on RET while saving the grid power substantially.

As rightly mentioned in the paper, solar power is currently the most commercialized amongst RETs used to power towers. With usage of efficient batteries for longer autonomy, solar power solutions can give upto 72 hours autonomy for a power efficient low power system.

To harness this contribution from both stakeholders i.e. equipment vendors and service providers is important. firstly there is need to identify the critical network components which contribute most significantly to the overall network power contribution and Govt must encourage the innovation and manufacturers with IPR ownership in India with right financial and policy support. TSP shall be provide incentive to deploy such products in their networks to achieve the RET targets.

We hope our above inputs will be considered suitably while TRAI is finalizing its recommendations on this important topic.

Thanking you,

Yours sincerely For **Telecom System Design & Manufacturers Association** 

Authorised Signatory

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