

महानगर टेलीफोन निगम लि०

( भारत सरकार का उद्यम )

Mahanagar Telephone Nigam Ltd.

(A Government of India Enterprise)

CIN: L32101DL1986GOI023501



MTNL/RA/TRAI/ CP-02 /2017

Dated 03.03.2017

06

To,

The Pr. Advisor (NSL)

TRAI, New Delhi

Sub. : Comments on TRAI Consultation Paper dated 16.01.2017 on  
"Approach towards sustainable telecommunications".

TRAI issued Consultation paper on 16.01.2017 on the aforesaid subject and asked the various stakeholders to comment on the issues involved in the consultation paper. In this reference following comments are submitted for consideration:

**Preliminary Comments:**

The Consultation paper is concerned with the energy consumption and associated carbon emissions, exclusively in reference to telecommunication network in Indian Telecom Industry. The carbon footprint for each service provider in the industry may be considered/calculated, while considering its energy consumption strictly in concern with the telecom network and not including its energy consumptions related to the administrative functions (administrative offices, let out space and for other purposes).

MTNL being a PSU have large building infrastructure to accommodate office space requirements of the large workforce (employees) and their other workplace related needs (dormitories, rest rooms, recreation facilities, canteens, inspection quarters etc.), and the energy consumption related to such facilities contributes to major part of its total energy consumption.

The sources of provision of energy needs to telecom networks and other administrative requirements are common for each building (accommodating network and administrative infrastructure), and it is not feasible to exactly demarcate the energy consumptions for different purposes.

Therefore, if the energy consumption/subscriber is calculated, the value will obviously be on much higher quotient for MTNL.

MTNL should therefore, in principle, be allowed to proportionate its energy consumptions, exclusively for telecom network, by a reasonable factor (to be calculated and submitted later), for purposes of establishing its stake of contribution to carbon emission in the industry.

**The question-wise comments are as given below:**

**Q1. What accuracy level may be set for collecting the data and also, what should be the basis for arriving at this threshold level? Please comment with justification.**

**MTNL Comments:** The paper mentions that Collection of data consists of diesel consumption, DG running hrs and grid electricity consumption. Accordingly the accuracy level may be set as high as 90% because out of three factors two factors are reliable & one factor DG run hrs is sceptical.

**Q2. Is there a need for auditing the carbon footprint of a telecom network by a third party auditor? If yes what is the mechanism proposed? Please comment with justification.**

**MTNL Comments:** There is no need for auditing the carbon footprint of a telecom network by a third party audit rather energy audit may be taken up seriously and be monitored closely.

**Q3. Do you agree with the given approach for calculating the carbon footprint? If not, then please comment with justification.**  
**New Formulae for calculation of Carbon footprint of Telecom network.**

**MTNL Comments:** Preliminary comments may be referred.

**Q4. Whether the existing formulae for calculation of Carbon footprints from Grid (given in paras 1.16, 1.17 and 1.1.8) of Chapter I need to be modified? If so, please comment with justification.**

**MTNL Comments:** The modified formulae incorporating emission factor appears to be more practical.

**Q5. Which emission factors as mentioned in Table 1.2 of Chapter I need to be used for the calculation (Average/OM/BM/CM)? Is there any other factor(s) needs to be considered in the calculation? Please comment with justification.**

**MTNL Comments:** Average emission factor of electricity of grid may be sufficient and be used for calculations.

**Q6. Is the formula mentioned in para 1.22 of Chapter I suitable for calculation of Carbon footprints from Grid supply? Please comment with justification.**

**MTNL Comments:** The modified formula uses actual electricity units consumed and seems to be more practical instead of using average load & electricity hrs per day which are both variable and prone to errors.

**Q7. Which of the formula, (i) or (ii) as given in para 1.23. of Chapter I is to be used for the calculation of carbon footprints from the Diesel generator along with views on possible values of  $\Phi$  and  $\eta$ ? Please comment with justification.**

**MTNL Comments:** Formula (i) in para 1.23 seems to be the accurate & practical for calculation of carbon footprints from DG Sets. In case of formula (ii)  $\Phi$  and  $\eta$  always have variable values so difficult to arrive at a conclusive figure.

**Q8. For calculation of average carbon footprint, which of the options mentioned in para 1.25 of Chapter I is to be used? Please comment with justification.**

**MTNL Comments:** Option-I seems to be more accurate as TSP has to maintain his network according to the total number of subscribers.

**Q9. 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.**

**MTNL Comments:** Hybrid power system is suggested, however constituents of hybrid system shall be selected as per site suitability.

**Q10. If electricity generated by a RET project (funded/ maintained by TSP) is also used for community, should it be subtracted from overall carbon emission of a TSP? Please comment with justification.**

**MTNL Comments:** Yes, in such a case TSP may be given advantage considering him a RET Power Producer.

**Q11. If the RET project is funded/ maintained by other agency, should that emission be counted? Please comment with justification.**

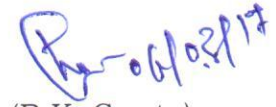
**MTNL Comments:** No, Because use of RET definitely reduces the burden on usage of fossil fuels.

**Q12. Please comment with justification on the approach suggested by the DoT committee.**

**Q13. 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.**

**Q14. 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.**

**MTNL Comments :** The recommendations of DoT committee appears to be justified. However, a workgroup/committee may be constituted to decide such timeframes for implementation, considering the practical constraints of all stakeholders.



(R.K. Gupta)  
DE(RA),CO