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Sub: Ericsson response to TRAI consultation paper "Approach towards Sustainable Telecommunications" (16 January, 2017)

Dear Sir,

Ericsson appreciates TRAI's initiative to bring out a consultation on sustainable telecom networks. Ericsson has been always committed towards improving energy efficiency in the telecom networks & products through its research, innovations and active engagement in global standards. We have gone through the consultation paper and would like to submit our views.

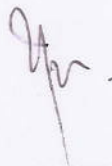
TRAI consultation is about the carbon footprint reduction. There are certain key aspects that are requested to be kept in view while deciding the solution(s) to meet the desired objectives.

1. While being a key business enabler for all other sectors, the overall contribution in carbon footprint by telecom sectors is considerably a small fraction of 2%.
2. There have been consistent significant improvements made in the technology for the energy performance of the networks. From GSM networks till LTE-Advanced, the energy performance has significantly improved from 6 KWh/GB to 0.4 KWh/GB (as delineated in schematic 1 below) at network level¹ comprising significantly enhanced peak spectral efficiency from 0.6 bps/Hz in GSM to 30 bps/Hz in LTE-A, and still improving. These improvements are by all means, are giant strides made possible from designing & implementation of components, efficient energy saving features in network adapting to traffic and other patterns, dense network deployments, evolving network architectures, antenna techniques, MIMO etc. Additionally, we would also like to convey that the next generation of network, i.e. 5G / IMT2020, will strive to improve the energy efficiency of telecom networks even further.

¹ Source: The Swedish Post and Telecom Authority (PTS) & Ericsson

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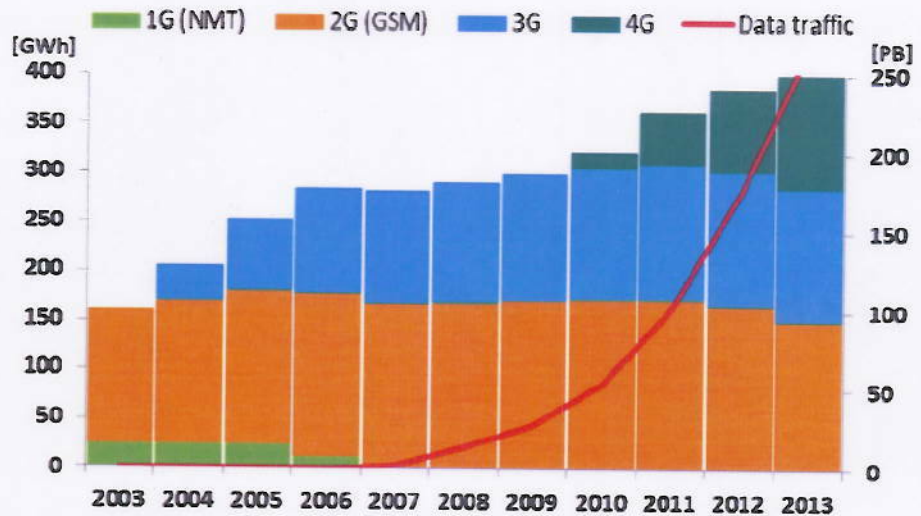
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Total Energy Consumption



Schematic 1. Mobile Networks Energy Data (Sweden case study)

3. There is large scope in improving the supply side (energy sources - mains, standby power sources etc.). The carbon footprint is directly related to diesel consumption which, in turn, is linked to grid power availability at sites. There is a need to improve the availability of consistent grid power at sites. A balance of improved grid availability and induction of viable alternative green energy sources would reduce the dependency on diesel consumption at base station sites and can bring down the contribution of carbon foot print further down.

To sum up, Ericsson would like to request that carbon footprint in the telecom sector may not be regulated and if necessary, light-touch regulation based on self-declaration supported by incentive framework may be adopted for the sector.

With best regards,

For Ericsson India Pvt. Limited

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