

Comments on Consultation Paper on Telecommunication Infrastructure Sharing, Spectrum Sharing, and Spectrum Leasing by TRAI dated 13.01.2023

As per COAI's representation to DoT dated 29.11.2021 on the subject: "Facilitating the Infrastructure Sharing between the Telecom Operators". The representation inter alia state that:

- *Telecom being capital intensive needs huge investments for growth and expansion of service. Therefore, it is important for telecom service providers (TSPs) to have a model which enables them to share infrastructure i.e., passive, active and core, to reduce CAPEX, OPEX and maximise network capacity and capabilities.*
- *There can be a cost saving of 16%-35% in passive infrastructure sharing in both CAPEX and OPEX.*

Keeping in view the above, apart from sharing of infrastructures amongst Telecom Licensees, utilization of infrastructure of other utilities such as power system infrastructure including **Power Transmission Towers** for Telecommunication services should also be advised.

In this regard, DoT has sent intimation to all UL/UL(VNO)/UAS Licensees, vide letter No. 20-271/2022 AS-I (Vol.-VI) dated 14.12.2022, to utilize Transmission line towers of Power Grid Corporation of India Ltd. (POWERGRID) for Mobile Radios (copy attached).

POWERGRID has developed a unique one-stop solution for utilization of Power Transmission Towers of POWERGRID for mounting Mobile BTS & Radio Transmission Systems, Antenna, etc. along with Fiber connectivity & Reliable Power Supply.

Presently, POWERGRID has more than 2,50,000 Towers spread across the country, including in remote areas, which could be gainfully utilized by Telecom Service Providers (TSPs) to leverage their services. The unique solution developed by POWERGRID offers the following advantages:

- **Reliable & Safe Power Supply:** Power is provided from transmission line to meet the power requirement of BTS. The power availability is more than 99.5% and hence, power supply for the installed systems would be very reliable even in the remotest areas. This will help in reducing dependency on DG Sets and thereby reduction in consumption of diesel and **carbon footprint**, which is also a part of the agenda of Govt. of India to protect the environment.
- **Space on Transmission Towers for installation of Antenna & outdoor BTS/Radio system:** The height of transmission towers varies from 40 to 50 meters and are suitable for mounting of Mobile/ Radio/ Microwave / Satellite Dish etc. Moreover, platforms on the towers, at height of 7-8 meters, can be created for installation of outdoor rack for telecom system i.e. DCPS, Battery Banks, Base Transceiver Station (BTS) etc.
This will eliminate the requirement of land space for installation BTS System & Telecom Tower etc. Also, as the platforms would be above ground level and hence, will be safe from flood, rodent menace etc.
- **Fiberized Towers:** POWERGRID has a vast fibre network laid on transmission lines (Optical Ground Wire-OPGW), utilised to provide Telecom connectivity to various TSPs, Govt. departments, Enterprises, Internet Service Providers (ISPs), OTT providers etc. As the OPGW network is laid on the power transmission lines, therefore, reliable & secure Telecom bandwidth through Fiber for backhauling of BTS applications is also available.
- **Active support from POWERGRID expert team:** POWERGRID has a round the clock expert team working on High Voltage transmission line towers to provide necessary support during installation and O&M of BTS/Antenna.

- **Carbon Footprint:** The energy which is otherwise discharged to earth is gainfully tapped & put to use.

The above solution is a one-stop solution for the TSPs for reliable & safe power supply, fiberized tower and infrastructure for Antenna & BTS and would enhance the 4G, 5G etc. services across the country without any constraints.

**Government of India
Ministry of Communications
Department of Telecommunications
Sanchar Bhawan, 20, Ashoka Road, New Delhi - 110001
(Access Services Wing)**

**No. 20-271/2022 AS-I (Vol.-VI)
th Dec, 2022**

Dated: 14

**To
All UL/UL(VNO)/UAS Licensees**

Subject: - Intimation for utilization of Transmission line towers of PowerGrid Corporation of India Limited (PGCIL) for Mobile radios- reg.

The undersigned is directed to convey that all licensees can explore possibilities of utilization of the Transmission Line Towers of PowerGrid Corporation India Limited (PGCIL) for hosting Mobile Radios for providing coverage in uncovered areas.

**(Prashant Verma)
ADG (AS-I)
Tel No.: 23036580**

Copy to:

1. DGT, DoT (HQ).
2. DDG (CS), DDG (DS), DDG (Sat.) for kind information please.
3. CMD, PGCIL for kind information please.
4. Director, NBM, DGT HQ, DoT .