

**GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS**

**LOK SABHA
UNSTARRED QUESTION NO. 563
TO BE ANSWERED ON 20TH NOVEMBER, 2019**

DISASTER RESILIENT TELECOM INFRASTRUCTURE

563. SHRI ACHYUTANANDA SAMANTA:

Will the Minister of COMMUNICATIONS be pleased to state:

- (a) whether the Government proposes to provide coastal areas with disaster resilient telecommunication infrastructure;
- (b) if so, the details thereof including the plan proposed by the Government for the next five years; and
- (c) if not, the reasons therefor?

ANSWER

**MINISTER OF COMMUNICATIONS, LAW & JUSTICE AND
ELECTRONICS AND INFORMATION TECHNOLOGY
(SHRI RAVI SHANKAR PRASAD)**

(a) & (b) Sir, As per the Standard Operating Procedure (SOP-2017) for Telecom Services for responding to disasters issued/enforced by Department of Telecom -Telecom Service Providers (TSPs) are required to implement the following measures in order to increase the robustness and prevent failures of their network during disasters:

- Telecommunication equipment should be installed at suitable locations in disaster prone areas to be able to withstand impacts of any disaster e. g. in flood prone areas location of exchanges/ critical equipment to be preferably at higher altitude area to avoid inundation of water. The plinth should be kept high in coastal and flood prone areas.
- Wherever feasible, critical equipment should not be concentrated in one building.
- All buildings, towers and equipment sites should be equipped with adequate fire protection measures like detection and extinguishing systems etc.
- All buildings, towers and equipment site structure should comply with building bylaws prescribed for earthquake resistant building depending upon seismic zones.
- As far as possible, communication cables should be buried underground in ducts to reduce their vulnerability.

- TSPs should ensure that transmission links between main Network Elements and switching equipment are redundant through two distinct geographical paths.
- According to hazard profile of the area, TSPs will identify vulnerability of their respective telecom infrastructure and accordingly prepare plan for emergency situations. All the vulnerable critical network components should have sufficient redundancy including transmission links and power backups in terms of battery storage capacity and diesel / fuel availability.
- Emergency situation often triggers overload of the network due to high traffic, anxiety calls and repeated call attempts. TSPs should ensure provision of an effective solution to prevent the crash of the network in such cases and develop effective congestion management processes which should be reviewed and tested periodically.

(c) Does not arise in view of above.
