

**Virtual Network Operators**

702. DR. PRADEEP KUMAR BALMUCHU: Will the Minister of COMMUNICATIONS AND INFORMATION TECHNOLOGY be pleased to state:

(a) whether it is a fact that the Ministry is opening doors for Virtual Network Operators (VNO) to offer mobile phone services in the country, if so, the details thereof; and

(b) the advantages of VNO and by when these will come into effect?

THE MINISTER OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (SHRI RAVI SHANKAR PRASAD): (a) Yes, Sir. The Telecom Commission has accepted the telecom regulators' recommendation to permit Virtual Network Operators in the country. Companies that provide telecom services without necessarily owning network infrastructure - within a licensing framework and allow them to offer voice, data and video services are known as Virtual Network Operators. The VNOs shall not own spectrum. VNO rely on the network of other telecom companies to provide services to consumers.

(b) Many network service operators have unutilised capacity in certain rural areas. VNOs can provide services in these areas using the network of existing Network Service Operators (NSOs) having unutilized capacity or by last mile connectivity. VNOs can be effective for delivery of service in airports or buildings or in smart cities. In these structural defined areas, the planning and development takes a long time, hence it is not practical for TSPs to plan and lay their infrastructure in such areas. A developer of such areas may therefore become a VNO and lay the infrastructure which can be connected to a Network Service Operator's network. Further, there are several organisations, which want to make their areas Wi-Fi enabled like Indian railways & Delhi city. So if they are allowed to become VNOs, then they can provide services according to the needs of customers and design innovative tariff plans to suit customers' needs. Cable TV operators can also act like a VNO and provide cable TV, Broadband and voice services. The Government is in the process of considering Telecom Commission recommendations on VNO.

**Measures by MTNL to overcome problems of call drops**

703. SHRI MOHD. ALI KHAN: Will the Minister of COMMUNICATIONS AND INFORMATION TECHNOLOGY be pleased to state:

(a) whether MTNL has taken a host of measures to overcome the problems of call drops in Delhi and if so, the details thereof;