Syllabus subtopic: Statutory, Regulatory and various Quasi-judicial Bodies.

Prelims and Mains focus: about the issue of call drops and its remedy; about TRAI

News: Telecom Regulatory Authority of India (TRAI) chairman has rubbished telecom operators’ claim that free voice calls are to blame for the poor quality of voice calls.

What is a call drop and why does it occur?

- In any mobile network, the capacity of each tower and, therefore, the network is limited by the availability of spectrum that can be used to carry traffic. Moreover, the customer usage pattern in terms of location and time of use is not static.

- The gap between the spectrum resources available and the spectrum resources required leads to overloading, which results in call drops. The lack of mobile towers across locations causes “coverage holes”, where the absence of radio signals results in the inability to make calls or in calls getting dropped when users are in such areas.

Has the problem become worse?

Four years ago, Reliance Jio entered the telecom sector with rock-bottom data tariffs and free voice calls. This exploded consumption on mobile networks, both for voice and data. It also led to a lot of voice traffic originating from Jio, but terminating at rival networks. The drastic cut in tariffs shrunk the revenue streams of operators, thereby reducing their appetite to invest in upgrading networks. Financial stress on the balance sheets of operators is a significant factor for poor quality networks. India has three private operators—Reliance Jio, Vodafone Idea and Bharti Airtel. Of these, only Jio is profitable.
Who is responsible for improving call quality?

- Call quality comes under Telecom Regulatory Authority of India (TRAI), which issues regulations covering subjects including tariff, interconnection and quality of service.

- In 2017, Trai moved to assessing dropped call rates at the mobile tower level instead of at the telecom circle level. In 2018, it tightened rules to check instances of call muting over VoLTE (voice over long-term evolution) networks.

What do operators say about this menace?

Operators say that in order to offer seamless network coverage without call drops they need to take their network closer to customers. This is possible only if hurdles are not created in the installation of towers, they say. Telcos complain that states and municipalities have not devised bylaws and right-of-way guidelines that could address the problem. They argue that mobile tariffs in India are among the world’s lowest. Lower tariffs imply more consumption per user and also less resources for telcos to invest.

What is the way to resolve this issue?

Installation of in-building solutions can offer customers some relief from the disruption caused by call drops. Last-mile telecom infrastructure needs to be erected to ensure people get faster connectivity in their high-rise complexes. Unlike developed nations, in India there is heavy dependence on wireless networks. India must invest in creating a robust optical fibre network to carry more traffic. A few operators have also launched voice-over-WiFi calling that users can activate on high-end smartphones.

About Telecom Regulatory Authority of India (TRAI)

- TRAI is a statutory body set up by the Government of India under section 3 of the Telecom Regulatory Authority of India Act, 1997.
• It is the **regulator** of the **telecommunications sector** in India.

• It **consists of a** Chairperson and **not more than two full-time members** and **not more than two part-time members**.

• The TRAI Act was amended by an ordinance, effective from 24 January 2000, establishing a **Telecom Disputes Settlement and Appellate Tribunal (TDSAT)** to take over the **adjudicatory and disputes functions from TRAI**.