

What is Starlink?

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In news— Elon Musk's Starlink is helping Ukraine in the fight against Russia.

About Starlink-

- **Starlink is a satellite constellation that comprises thousands of small satellites in low-Earth orbit.**
- SpaceX first began sending them into space in 2019 and currently, there are more than 3,000 of these satellites that send internet signals to designated ground receivers.
- **Unlike traditional internet providers, Starlink doesn't require any ground infrastructure.**
- **One just needs to have a small satellite dish or a receiver device to access high-speed internet,** much like satellite TV.
- The company also has a mobile application for Android and iOS that uses augmented reality to help customers choose the ideal location and position for their receivers.
- In total, nearly 12,000 satellites are planned to be deployed, with a possible later extension to 42,000.
- The SpaceX satellite development facility in Redmond, Washington houses the Starlink research, development, manufacturing, and orbit control teams.

The issue of space crowding-

- Since its launch, Starlink has also been the subject of heated debates regarding **space debris and satellite crowding.**
- The first Sputnik satellite was launched into space in 1957 and some 8,500 satellite launches have followed since.
- Experts say that SpaceX's ambitious plan of launching

42,000 more satellites in the next few years might lead to overcrowding in our orbit, which in turn would impede astronomers from making observations from Earth.

- In February 2022, NASA also raised concerns about SpaceX's plan and said it not only would increase congestion in space but also raise the potential for collisions, and interfere with the agency's activities.
- The satellites of Starlink work only for five years and once they are dysfunctional, they remain in space and contribute to space debris.