US FCC approves SpaceX's 'Starmind' AI satellite constellation

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News

The US Federal Communications Commission (FCC) on 25 Nov 2026 authorised SpaceX to deploy "Starmind", a constellation of up to 1 million satellites that will work as orbital data centres for artificial intelligence, linked by laser (optical) links, at altitudes of about 500–1,000 km. The FCC called it the first authorisation of its kind. SpaceX must start deploying by Nov 2033 and complete it by 2040. Objections by Amazon, Viasat and the American Astronomical Society were rejected.

Key facts for the exam

Point	Details
Regulator	Federal Communications Commission (USA)
Company	SpaceX
Purpose	AI computing (data centres) in orbit
Orbit	Low Earth Orbit (about 500–1,000 km)

Background

- The FCC is an independent US agency created by the Communications Act of 1934; it licenses radio spectrum and satellite systems. SpaceX already runs Starlink, the largest Low Earth Orbit (LEO) internet constellation.

- LEO lies roughly 160–2,000 km above Earth. Huge constellations raise concerns about space debris, collisions and light pollution for astronomy. In India, IN-SPACe (2020) authorises private space activity, and Starlink received a GMPCS licence from the Department of Telecommunications in 2025.

Tamil Nadu link: ISRO is building India's second spaceport at Kulasekarapattinam (Thoothukudi district) for SSLV launches to low Earth orbit.

Frequently asked questions

What is this news about?

The US Federal Communications Commission (FCC) on 25 Nov 2026 authorised SpaceX to deploy "Starmind", a constellation of up to 1 million satellites that will work as orbital data centres for artificial intelligence, linked by laser (optical) links, at altitudes of about 500–1,000 km. The FCC called it the first authorisation of its kind.

What are the key facts to remember for the exam?

Regulator: Federal Communications Commission (USA); Company: SpaceX; Purpose: AI computing (data centres) in orbit; Orbit: Low Earth Orbit (about 500–1,000 km).

What is the background to this news?

The FCC is an independent US agency created by the Communications Act of 1934; it licenses radio spectrum and satellite systems.

Practice questions (with answers)

1. What is the purpose of SpaceX's 'Starmind' satellite constellation?

A) Weather radar monitoring

B) GPS-like navigation

C) Communication relay to Mars

D) To work as AI data centres in orbit

Answer: D – Explanation: Linked by lasers, these satellites will do AI computing in space.

2. The FCC, which approved Starmind, is

A) A US military command

B) A NASA research centre

C) A wing of the European Space Agency

D) An independent US communications regulator

Answer: D – Explanation: The FCC was created by the Communications Act of 1934 and licenses spectrum and satellites.

3. Which UN agency allocates spectrum and orbital slots?

A) IMO

B) WMO

C) ITU

D) IAEA

Answer: C – Explanation: Geneva-based ITU, begun in 1865, is one of the oldest UN specialised agencies.

4. Statement 1: The American Astronomical Society backed Starmind. Statement 2: Huge constellations raise space-debris risk. Which is/are correct?

A) 1 only

B) 2 only

C) Both 1 and 2

D) Neither 1 nor 2

Answer: B – Explanation: The Society petitioned against approval and the FCC rejected it, so only statement 2 is correct.

5. ISRO's second spaceport at Kulasekarapattinam, Thoothukudi district, is mainly for which launch vehicle?

A) Gaganyaan crew vehicle

B) Small Satellite Launch Vehicle (SSLV)

C) PSLV-XL

D) GSLV Mk III (LVM3)

Answer: B – Explanation: SSLV puts small satellites into low Earth orbit; the first spaceport is Sriharikota.