

SpaceX deploys satellites, to bring internet to all

What is in news?

“SpaceX launched two other mini satellites into orbit to assess the viability of its CEO Elon Musk’s dream of creating the Starlink constellation — a network of satellites to deliver low-cost, high-speed internet globally.”

About it:

- ✓ SpaceX successfully launched an Earth observation satellite from the Vandenberg Air Force Base in California using its workhorse Falcon-9 rocket.
- ✓ SpaceX launched two other mini satellites into orbit to assess the viability of its CEO Elon Musk’s dream of creating the Starlink constellation — a network of satellites to deliver low-cost, high-speed internet globally.
- ✓ “Falcon launch carries 2 SpaceX test satellites for global broadband. If successful, Starlink constellation will serve least served.” Musk said.
- ✓ The main payload of the rocket was a radar-imaging satellite built for Spain, the Paz.

PAZ (Spanish for "peace") is a Spanish military Earth observation satellite launched on 22 February 2018. The satellite is operated by Hisdesat. PAZ was previously referred to as SEOSAR (Satellite Español de Observación SAR)

- ✓ Starlink is expected to have over 12,000 small satellites — more than all the satellites that have been launched in history — that will be placed in two layers of satellite constellation at a low Earth orbit (LEO) of 4,425 satellites at altitudes ranging from 1,110 km to 1,325 km, and very low Earth orbit (VLEO) of 7,518 satellites operating at altitudes from 335 km to 346 km.
- ✓ While the LEO Constellation will provide high-speed broadband service around the world, the VLEO Constellation is expected to enhance capacity by being able to focus on a narrower area.
- ✓ SpaceX also achieved another milestone on Thursday, when it recovered at least one of the fairings — the nosecone on top of the rocket that covers the payload.
- ✓ It is usually not recovered after a mission but this time, SpaceX decided to invest in getting it back. SpaceX’s mission is to make rockets fully reusable, which will reduce the cost of space exploration by at least a hundredfold.
- ✓ After the launch, the nosecone separates into two fairings after it has deployed the payload. SpaceX fitted its nosecone with a parachute, which helped reduce the speed at which it returned to Earth.

Prelims Question:

23-02-2018

Q) The PAZ is a military Earth observation satellite launched by SpaceX belongs which of the given below country?

- a) U.K
- b) Russia
- c) USA
- d) Spain

Ans: d

Mains Question:

Q) What is Starlink constellation? Explain about SpaceX deployed satellites, to bring internet to all which is recently in news?