Cabinet clears proposals worth ₹32,000 cr for key space missions

SPACE BOOST. Funds cover Chandrayaan-4, Venus Orbiter, space station, and next-gen launch vehicle

Our Bureau New Delhi

Union Cabinet, chaired by PM Narendra Modi, on Wednesday, approved proposals worth ₹32,000 crore in the Science and Technology sector, aimed at placing the country on the global space-tech map.

Chandrayaan-4, Venus Orbiter, a follow-on to the Gaganyaan programme, and the development of a next-generation launch vehicle were the four key proposals that were approved.

CHANDRAYAAN-4 MISSION In the case of the Chandrayaan-4 Mission an outlay of ₹2,104.06 crore has been allocated.

The mission includes two launch vehicle missions and docking in orbit; landing on the lunar surface, lunar sample collection and containerisation; the ascent of spacecraft module from the lunar surface; docking and undocking of lunar orbit and



ALTHING FIGHT, ISRO chief S Somnath speaking at a media briefing on the Cabinet decisions in New Delhi on Wednesday PTI

return and re-entry to earth for sample delivery. The project is expected to materialise in around 36 months.

"This would have multiple benefits including making India even more self-reliant in space technologies, boosting innovation and supporting academia," PM Narendra Modi said in a post on X.

VENUS ORBITER

The Venus Orbiter - the country's first interplanet-

ary mission to Earth's sister planet – is aimed at studying the underlying causes of the transformation of Venus from being a potential habitable planet.

The mission will focus on studying the Venusian atmosphere and its geological evolution.

SPACE STATION

The outlay for the development of technology and other mission-related activities is pegged at ₹1,236

crore with the launch scheduled in March 2028.

Also approved was the development and launch of the first module of Bharatiya Antariksh Station (BAS-1), a space station.

The Gaganyaan demonstration and follow-on missions leading to the launch of BAS-1 (comprising 8 missions) are pegged at an estimated cost to the tune of ₹20.193 crore.

According to Union I&B and IT Minister, Ashwini Vaishnaw, the project is scheduled for completion around December 2029 including all launches and operationalisation of BAS-1. The scope and funding of the Gaganyaan programme will also be revised to include new developments for BAS and precursor missions and any other additional requirements.

LAUNCH VEHICLE

"The Mission will bring India closer to a self-sustained space station by 2035 and a crewed lunar mission by 2040," PM Modi wrote on X. Amongst the other major projects cleared in the sector was the development of the 'next generation launch vehicle' at an estimated cost of ₹8,239 crore. The project will include technology development and three development flights within a 96-month time frame. The first flight is expected in 84 months (7 years).

The next-generation launch vehicle will feature a partially reusable, cost-effective and commercially viable offering to meet goals defined in India's space programmes.

It will be possible to operate the BAS missions and for India crewed lunar missions scheduled through this launch vehicle.

The space launcher will have a payload of 30 tonnes to Low Earth Orbit; it will be a three-stage vehicle with liquid oxygen-methane and cryo propulsion, a reusable booster stage with clustered engines and scalable configurations.