

## **India Adopts CubeSat Standard**

## Source: LM

Recently, India adopted the **global CubeSat standard**, marking a significant step in its ambition to enhance its footprint in the **global space economy**.

## CubeSat:

- CubeSat standards define a modular satellite framework (1 unit (U) = 10 cm³, ≤1.33 kg) compatible with standard deployers, requiring uniform dimensions, low-outgassing materials, kill switches, and rigorous testing.
  - The standard CubeSat size uses a "one unit" or "1U" measuring 10x10x10 cms and is extendable to larger sizes like 1.5, 2, 3, 6, and even 12U.
- The <u>Bureau of Indian Standards</u> (an arm of the <u>Department of Consumer Affairs</u>), helps educational and research organisations <u>develop CubeSats with commercial</u> components, offering a cost-effective satellite alternative.
  - **Examples:** Indian universities, with <u>ISRO</u> support, have launched several student-built satellites. Notable examples like **JUGNU** (<u>IIT</u> Kanpur) and <u>KalamSAT</u> (Space Kidz India).
- India's Space Sector:
  - India's space economy, currently at USD 8 billion, aims to reach USD 100 billion by 2040
  - The government is opening the space sector to private companies and has earmarked a **Rs**1,000 crore venture capital fund to stimulate growth and innovation.
    - Under the amended FDI policy, 100% FDI is allowed in the space sector.

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