August 9, 2023

Transfer of IMS-1 Satellite Bus Technology to Dhruva Space Pvt. Ltd. (Dhruva Space)

In a continued effort to boost private sector involvement in India's space domain, NewSpace India Limited (NSIL) transfers the IMS-1 Satellite Bus Technology developed by ISRO to M/s Dhruva Space Pvt. Ltd. (Dhruva Space). Dhruva Space is one of the two private players to receive the transfer of IMS-1 technology through Interest Exploratory Note (IEN) published by NSIL. In an event organised at NSIL headquarters on 09th August 2023, NSIL handed over Technology Transfer Documents to M/s Dhruva Space Pvt. Ltd.

The IMS-1 satellite bus, developed by the U R Rao Satellite Centre (URSC)/ISRO, is a versatile and efficient small satellite platform designed to facilitate low-cost access to space. The bus serves as a dedicated vehicle for various payloads, enabling Earth imaging, ocean and atmospheric studies, microwave remote sensing, and space science missions while ensuring a quick turnaround time for satellite launches.

IMS-1, weighing about 100 kg can accommodate a 30 kg payload. Solar arrays generate 330 W power with a raw bus voltage of 30-42 V. It offers a 3-axis stabilization with four reaction wheels with a 1 N thruster that provides +/- 0.1 degree pointing accuracy. IMS-1 bus was utilised in previous ISRO missions like IMS-1, Youthsat and Microsat-2D.

By transferring the IMS-1 technology to the Indian private sector, NSIL/ISRO aims to bolster India's industrial growth in the space sector and foster technological self-reliance. This development opens up new avenues for private players to contribute to space research and exploration, in line with India's vision to expand its presence in the global space market.

Dhruva Space provides full-stack space-engineering solutions across launch, space and ground segments. The company is engaged in the development of small satellites in the commercial, governmental and academic markets. <u>https://www.dhruvaspace.com/</u>

