

# Isro to tap opportunity in global small satellite launch space

**T E NARASIMHAN**  
New Delhi, 21 November

The Indian Space Research Organisation (Isro) is working on a smaller rocket that could potentially be a designated vehicle to carry small and micro satellites and to cement the country as a global hub for small satellite launches.

"Globally, demand for small rockets are growing and we want to capture this market by offering cost-effective solutions," said K Sivan, director, Vikram Sarabhai Space Centre, Isro. He said the development of the newer rocket would cost only one-tenth of PSLV but declined to specify. Sivan made these comments here on Tuesday on the sidelines of a Isro-Ficci conference.

Isro is betting on a smaller rocket as it sees a global shortage of small launchers and a growing demand for vehicles to take small satellites into space. Over 6,200 small satellites (of less than 50 kg) are expected to be launched by 2026, 70 per cent from commercial operators, according to global space researcher Euroconsult. The market value of these small satellites could triple to \$30.1 billion in the next 10 years, up from \$8.9 billion over the previous decade, it said in a July 2017 report.

So far, Isro has launched small and micro satellites on its workhorse Polar Satellite Launch Vehicle (PSLV), piggybacking on heavier earth observation satellites into space. In February, PSLV launched 104 satellites in one mission, including 88 nano satellites of US satellite-maker Planet Labs, creating a world record for hurling the maximum satellites in one launch.

Isro had smaller rockets in its fleet — the SLV 3 and the ASLV, with payloads of 44 kg and 150 kg, respectively — but it is not known if these launchers will be revived.

Over the last three decades, it has built PSLV to launch earth observation satellites of up to 1,200 kg and

Geosynchronous Satellite Launch Vehicle (GSLV) to launch communication satellites into higher orbits.

Isro will allow private companies to make small rockets after one or two years.

Glavkosmos, which specialises in rocket and satellite solutions, has said it would be ready for global launch before the end of next year. "It will also find its way to India soon," said Vitaly Safonov, general director deputy, Glavkosmos. "I think we will come to it, because in a globalised world, co-operation between countries is also important".



## Satellite maker Alpha Design to go public in six months

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Alpha Design Technologies, first private firm to build satellites for Isro, is planning to go public in the next six months. The PE-backed medium enterprise will be investing major portion of the proposed ₹400 crore in space business, which the Bengaluru-based company is betting big on.

Speaking to *Business Standard* on the sidelines of International Seminar on Indian Space Programme, organised by FICCI and Isro, H S Shankar, chairman and managing director, Alpha Design Technologies said the company plans to raise around ₹300-400 crore, at least 50 per cent of the money will go towards space.

The Bengaluru-based aerospace firm Alpha Design Technologies leads a consortium to build a navigation satel-

lite, Navic, early this year.

The company said Isro's decision to open doors for private enterprises to build satellites and demand from global market, to build small satellites, will help the company, which is planning to become an end to end service provider in the next three years. "We are expecting around ₹2,000 crore revenue every year from space business, both domestic and global markets," said Shankar, who bided for Isro's proposed plan to let private firms to build 30 satellites. The company is strengthening the space business by recruiting around 900 people in the next three years and setting up a green field facility in Karnataka.

Besides, building satellites the company is also planning to focus on ground segment, including setting up receiving terminals, antenna, last mile connectivity among others.