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NEXT, GSAT-11 AWAITS 200 CRORE GROUND SYSTEM

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Ariane5 VA-246 lifted off from Kourou Launch Base at 02:07 am (IST) carrying GSAT-11. Photo: Twitter/@isro

Now that GSAT-11, the third and latest Internet-boosting communication satellite, is up in space, the Indian Space Research Organisation (ISRO) says it is in the process of readying a 150-200-crore ground infrastructure across cities to use it.

A Ka-band hub or gateway each is being set up in Delhi, Bengaluru, Ahmedabad and Ranchi to deliver high-speed broadband services via the giant satellite.

K.Sivan, Chairman, ISRO, said, “The activity of establishing the ground system is on and it may happen over some more months.”

The nearly six-tonne heavyweight satellite was launched in December 5 on a European launcher. Along with its older HTS mates — GSAT-19 and GSAT-29 — it forms an Indian quartet of high-throughput satellites (HTSs). Each of them has a different space location over India and must have its own ground systems.

The ground systems are being put up by external agencies chosen through competitive bidding. They will also be operated and maintained by them for five to seven years. Dr. Sivan admitted that there were “procedural delays” in completing the system with outside support.

The use of the Ka band will be new in the country. In 2017, ISRO’s payload developing unit, the Space Applications Centre (SAC) in Ahmedabad, had put out a search or RFP (request for proposal) for companies that could set up GSAT-11’s Ka-band ground systems.

About the HTSs, Dr. Sivan said, “Our target is to deliver close to [a Net data speed at the rate of] 100 Gbps through them. We have planned a fourth one, too — the GSAT-20. It will be a four-tonne-class HTS and will be launched towards the second half of 2019 on our GSLV MarkIII vehicle. With that, our current national requirement should be met.”

The fleet is designed to mainly serve the remote and hilly northeastern States, and Jammu & Kashmir, which are starved of reliable Net services. “Our concentration is on those areas, where it is not possible to establish terrestrial cables as in cities,” Dr. Sivan said.

Referring to the consecutive launches of GSAT-29 in November and GSAT-11 in December, Dr. Sivan said, “Within a matter of about 20 days, we have already beefed up the requirements of VSATs (very small aperture terminals) by putting up two satellites suited to them.”

Weighing about 5,854 kg, the GSAT-11 is the “heaviest” satellite built by ISRO.

END