Isro’s juggernaut has space for big and small

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The successful deployment of Chandrayaan-3 lander and rover on the moon, and Indian Space Research Organisation’s (Isro’s) chairman S Somanath’s statement on Thursday that maiden solar mission ‘Aditya’ is ready for launch next month have opened a big space for the vendors and ancillary industry. Further, a host of startups that provide space-tech aggregator services are also upbeat with several opportunities coming their way.

Cameras, remote sensing devices, aggregating satellite services are some of the areas where several startups are active and see a huge opportunity going ahead. For bigger firms, which acted as vendors for Isro in the Chandrayaan mission, like Larsen & Toubro, Tata Consulting Engineers, Bhel, MTAR Technologies, Godrej Aerospace and Walchandnagar Industries, among others, the order book will continue to be full in the days to come.

This was amply exhibited when Amit Sharma, MD and CEO, Tata Consulting Engineers, told FE: “TCE expects to be a crucial player in the future space projects too. We have manpower and crucial talent needed to develop the components required.”

Similar was the view of P Srinivas Reddy, managing director, MTAR Technologies, which supplied the liquid propulsion engines, safety couplers, valves, pneumatic modules to Isro for the Chandrayaan-3. “We have worked with Isro on every project. The first engine that we delivered to them was in 1989. Any project that Isro undertakes, our engines are used for it. It is a continuous process,” Reddy said. He added that the company is currently designing and developing a launch vehicle with the support of Isro and it will take 3-4 years to complete this.

“Supplying to Isro has always been a matter of pride to us. We are looking forward to participating in the material requirements of upcoming space programmes such as the Gaganyaan, crewed spacecraft and Aditya-L1, the first Indian mission to study the Sun,” Jindal Stainless MD Abhyuday Jindal said. The company supplied a special, high-strength alloy steel grade that was used in the motor casing of Chandrayaan-3 and is working towards meeting the material requirements of the upcoming missile programmes.

For the startups operating in this space, opportunities lie in the low-cost space launch vehicles and nano-satellites.

“There are around 150 aerospace startups in India. We are looking at the growth of ancillary businesses besides introducing services such as space rickshaw – a concept which provides space as a service,” said Srimathy Kesan, founder SpaceKidz, an Indian aerospace startup engaged in design, fabrication and launch of small satellites.

Skyroot, an aerospace startup, which had launched Vikram-S, a privately-built space rocket last November, also underlined the great opportunities that lie ahead. Pawan Kumar Chandana, co-founder, Skyroot Aerospace, said, “It is a great opportunity for OEM players like us. Our core focus will be on launching low-cost launch vehicles in India.” The company, counts Mukesh Bansal and Singapore’s sovereign wealth fund GIC, among its investors.

Pixxel, Bengaluru-based space startup, said that the foundation for growth has been laid. “Though it is a high-risk business, we still see opportunities to scale up,” Awais Ahmed, CEO, Pixxel, said. The company manufactures small satellites and has recently a won a government grant to develop 150 kg satellite.

According to a recent study by global management consulting firm Arthur D Little, the space ecosystem is vast and evolving with a range of activities, some of which India is yet to explore. “These hidden opportunities could be potentially harnessed to create a $100-billion industry in India by 2040, capturing an about 10% share of the global pie. However, this could require an immediate focus and strong will of the government to actively resolve all issues faced by stakeholders,” the report said.