

The **Indian Space Research Organisation** is the [space agency](#) of the [Government of India](#) and has its headquarters in the city of [Bengaluru](#). Its vision is to "harness space technology for national development while pursuing space science research & planetary exploration".<sup>[8]</sup> The [Indian National Committee for Space Research](#) (INCOSPAR) was established in the tenure of [Jawaharlal Nehru](#) under the [Department of Atomic Energy](#) (DAE) in 1962, with the urging of scientist [Vikram Sarabhai](#) recognizing the need in space research. INCOSPAR grew and became ISRO in 1969,<sup>[14]</sup> also under the DAE. <sup>[16]</sup> In 1972, Government of India had setup a Space Commission and the [Department of Space](#) (DOS), bringing ISRO under the DOS. The establishment of ISRO thus institutionalized space research activities in India.<sup>[18]</sup> It is managed by the DOS, which reports to the [prime minister of India](#).

ISRO built India's first [satellite](#), [Aryabhata](#), which was [launched by the Soviet Union](#) on 19 April 1975.<sup>[20]</sup> It was named after the mathematician [Aryabhata](#). In 1980, [Rohini](#) became the first satellite to be placed in orbit by an Indian-made launch vehicle, [SLV-3](#). ISRO subsequently developed two other rockets: the [Polar Satellite Launch Vehicle](#) (PSLV) for launching satellites into [polar orbits](#) and the [Geosynchronous Satellite Launch Vehicle](#) (GSLV) for placing satellites into [geostationary orbits](#). These rockets have launched numerous [communications satellites](#) and [Earth observation satellites](#). Satellite navigation systems like [GAGAN](#) and [IRNSS](#) have been deployed. In January 2014, ISRO used an [indigenous cryogenic engine](#) in a GSLV-D5 launch of the GSAT-14.

ISRO sent a lunar orbiter, [Chandrayaan-1](#), on 22 October 2008, which discovered [lunar water](#) in the form of ice,<sup>[23]</sup> and the [Mars Orbiter Mission](#), on 5 November 2013, which entered [Mars orbit](#) on 24 September 2014, making India the first nation to succeed on its maiden attempt to Mars, as well as the [first space agency in Asia](#) to reach Mars orbit. <sup>[24]</sup> On 18 June 2016, ISRO launched twenty satellites in a single vehicle,<sup>[25]</sup> and on 15 February 2017, ISRO launched one hundred and four satellites in a single rocket ([PSLV-C37](#)), a world record. ISRO launched its heaviest rocket, Geosynchronous Satellite Launch Vehicle-Mark III (GSLV-Mk III), on 5 June 2017 and placed a communications satellite GSAT-19 in orbit. With this launch, ISRO became capable of launching 4-ton heavy satellites into [GTO](#). On 22 July 2019, ISRO launched its second lunar mission [Chandrayaan-2](#) to study the lunar geology and the distribution of [lunar water](#).

Future plans include development of the [Unified Launch Vehicle](#), [Small Satellite Launch Vehicle](#), development of a [reusable launch vehicle](#), human spaceflight, a [space station](#), [interplanetary probes](#), and a [solar spacecraft mission](#).<sup>[28]</sup>