



Small satellite for Bhutan to be launched in December



ceremony was held virtually between the ISRO and the Department of Information Technology and Telecommunication (DITT), MoIC on September 24 on the joint development of a small satellite for Bhutan.

The implementing arrangement, meanwhile, is a document that lists out the terms and conditions for cooperation between India and Bhutan on the actual development, launch and operation of the Joint Satellite, thus giving a practical shape to an ambitious vision.

The ceremony was attended by Ambassador of Bhutan to India Major General Vetsop Namgyel, Scientific Secretary of the ISRO

Umamaheswaran R, Officiating Foreign Secretary of Bhutan Aum Pema Choden, Secretary of MoIC Phuntscho Tobgay, and officials from the Ministry of External Affairs.

According to the press release from the Indian Embassy in Thimphu, space technology is a promising area of India-Bhutan cooperation in accordance with the vision of Prime Minister Narendra Modi and His Majesty The King of Bhutan to take the India-Bhutan partnership to new and emerging areas of the 21st century and add a fresh dimension to the multi-faceted India-Bhutan ties.

The present collaboration between the ISRO and the DITT is also pursuant to the India-

Bhutan Joint Statement of the state visit issued during the visit of the Indian Prime Minister to Bhutan in August 2019 and the MoU between India and Bhutan on Cooperation in the Peaceful Uses of Outer Space signed on November 19, 2020.

Further, in a virtual meeting between Prime Minister Narendra Modi and Prime Minister Dr Lotay Tshering on November 20, 2020, Prime Minister Modi had announced that the small satellite for Bhutan will be launched in 2021 and that the Indian side will extend capacity building to Bhutanese engineers for this purpose. Taking this proposal forward, the ISRO organized the first phase of training for a team of four

Bhutanese space engineers from the DITT, MoIC, at the UR Rao Satellite Centre (URSC) in Bengaluru, India from December 28, 2020 to February 25, 2021.

Phase-I of the training involved various theoretical and technical aspects as well as visits to laboratories and test facilities. The Bhutanese team will travel to India in October 2021 for Phase-II of the training, which will involve activities towards developing the small satellite for Bhutan, INS-2B and integration of Bhutan's payload into INS-2B. Bhutan's satellite will be launched into space on a Polar Satellite Launch Vehicle (PSLV), ISRO's reliable and versatile workhorse launch vehicle from the Satish Dhawan Space Centre in Sriharikota along with OceanSat 3- an earth observation satellite dedicated to the study of the atmosphere and the ocean.

The satellite will reportedly be a Cubesat and is being fully funded by the Government of India. The primary payload will be a nano-multispectral payload which will provide high resolution images of the earth, thus helping Bhutan in disaster management and resource mapping. The secondary payload is a digipeater, designed

and built by Bhutan, which will function as an amateur radio satellite and thus enhance Bhutan's understanding of wireless communication through satellites.

"The Project is in line with the vision of His Majesty The King of Bhutan to harness space technology and its applications for the benefit of the country and its people. The project also adheres to Prime Minister Narendra Modi's vision to keep our people at the heart of the India-Bhutan relationship. The Project is also in accordance with the Government of India's Neighbourhood First Policy under which India accords priority to its relations with all its neighbours, particularly Bhutan," states the press release from the Embassy of India in Thimphu.

At the signing ceremony, Ambassador of India Ruchira Kamboj said, "We are delighted that we have reached the last stage as Bhutanese engineers are all set to leave for Bengaluru in October 2021, as a precursor to the launch of Bhutan's satellite in December 2021. We salute the vision of our leadership Prime Minister Narendra Modi and His Majesty The King of Bhutan on this occasion."