

<http://www.hindustantimes.com/india-news/isro-to-launch-a-back-up-navigation-satellite-by-august-end/story-MWjoD6M53sjHo2djE8QOhO.html>

ISRO to launch a 'back-up' navigation satellite by August end

Indian Space Research Organisation (ISRO) will launch its navigation satellite IRNSS-1H by the end of this month to augment the existing seven satellites of NavIC constellation, a senior ISRO official said.

To be launched on board PSLV-C39, IRNSS-1H will be a "back up" navigation satellite for IRNSS-1A, one among the seven satellites in the constellation, as its three rubidium atomic clocks on board had stopped functioning.

"IRNSS-1H on board PSLV-C39 will be launched by the end of this month. The exact date will be decided shortly," a senior ISRO official told PTI.

He said IRNSS-1H will be a back up for IRNSS-1A, whose three "imported atomic clocks had failed".

The Indian Regional Navigation Satellite System (IRNSS) is an independent regional navigation satellite system developed by India on par with US-based GPS.

The system that offers services like terrestrial and marine navigation, disaster management, vehicle tracking and fleet management, navigation aide for hikers and travellers, visual and voice navigation for drivers, was named as 'NavIC' (Navigation with Indian Constellation) by Prime Minister Narendra Modi.

ISRO had launched seven satellites - IRNSS-1G on April 28, 2016, IRNSS-1F (March 10, 2016), IRNSS-1E (January 20, 2016), IRNSS-1D (March 28, 2015), IRNSS-1C (October 16, 2014), IRNSS-1B (April 4, 2014) and IRNSS-1A on July 1, 2013.

According to ISRO officials, the total cost of all the seven satellites was Rs 1,420 crore.