

Indian Regional Navigation Satellite System

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Indian Regional Navigation Satellite System Latest News

ISRO will launch three navigation satellites for its Indian Regional Navigation Satellite System (IRNSS) by 2026.

About Indian Regional Navigation Satellite System

- It is India's **independent regional navigation** satellite system also known as **NavIC (Navigation with Indian Constellation)**.
- It is developed in India by the **Indian Space Research Organisation (ISRO)**.
- IRNSS envisages the establishment of a regional navigational satellite system using a combination of geosynchronous orbit(GEO) and geostationary orbit (GSO) spacecraft and state-of-the-art ground systems.
- **Area covered:** IRNSS-NavIC is designed to provide accurate position information service to users in India and the region **extending up to 1500 km** from its boundary.
- **IRNSS-NavIC network:** NavIC is designed with a **constellation of seven satellites** and a network of ground stations operating around the clock.
 - **Three satellites** are placed **in GSO**.

- **Four** satellites are placed in **inclined GEO**.
- IRNSS provides two types of services, namely:
 - **Standard Positioning Service** (SPS) – that is provided to all users.
 - **Restricted Service** (RS) – an encrypted service provided only to authorised users.
- The signals of the other global navigation satellite systems (GNSS), including GPS, GLONASS, Galileo, and BeiDou provide interoperability with those of the NavIC SPS signals.

Source: IE

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