



## Bhuvan Portal

---

 drishtiias.com/printpdf/bhuvan-portal

### Why in News

---

Recently, **Indian Space Research Organisation (ISRO)** and **MapmyIndia** have partnered to come up with an **indigenous geospatial portal** known as '**Bhuvan**'.

This is in line with the above discussed new **guidelines for the Geo-Spatial Sector** in India.

### Key Points

---

- **Geospatial Portal (Bhuvan):**

It is a type of web portal **used to find and access geographic information** (geospatial information) **and associated geographic services** (display, editing, analysis, etc.) **via the Internet**.

- **The Collaboration:**

- **MapmyIndia's database** will be connected with **ISRO's high-end satellite catalogue and earth observation data**, which it generates through a constellation of its satellites.
- The collaboration will enable them to jointly identify and build a holistic **geospatial portal** utilising earth observation datasets, **Navigation in Indian Constellation (NavIC)**, Web Services and **APIs** (application programming interface) available in MapmyIndia.
  - **API** is a **software intermediary** that allows two applications to talk to each other.
  - It is a computing interface that defines **interactions between multiple software intermediaries**

- **Significance of the Portal:**
  - **True Maps:**

Its services will **reflect the true borders of the country** as per the information available from Government of India.
  - **Protects Privacy:**
    - By using MapmyIndia maps and applications instead of the foreign map apps, **users can better protect their privacy.**
    - As foreign search engines and companies claim to offer ‘free’ maps, but in reality, they make money by targeting the same users with advertising, by **invading the user’s privacy and auctioning private location and movement data.** However there is no such provision of advertisement in MapmyIndia.
  - **Atma Nirbhar Bharat:** Being an Indian platform, it is well aligned with the government's Mission of **Atma Nirbhar Bharat**.
- **MapmyIndia:**
  - **About:**
    - It is an **Indian technology company** that builds digital map data, telematics services, Global Information System and **Artificial Intelligence** services.
    - It is an alternative to **Google Map**, which covers as many as 7.5 lakh Indian villages and 7,500 cities.
  - **Database:**

The database has a road network connected by 63 lakh km and the organisation claims to consist of the most exhaustive digital map database of the country.
  - **Use:**

Almost all the vehicle manufacturers in India who come with built-in navigation systems are using MapmyIndia.
  - **Other Products:**

App called ‘**Move**’ that provides **real-time traffic updates and navigation.**

## Navigation in Indian Constellation (NavIC)

- **About:**
  - It is an **Indian Regional Navigation Satellite System (IRNSS)**, developed by the Indian Space Research Organization (ISRO).
    - IRNSS **consists of eight satellites**, three satellites in geostationary orbit and five satellites in geosynchronous orbit.
  - It works just like the established and popular **U.S. Global Positioning System (GPS)** but within a 1,500-km radius over the sub-continent.
  - It has been **certified by the 3<sup>rd</sup> Generation Partnership Project (3GPP)**, a global body for coordinating mobile telephony standards.

- **Objective:**

The main objective is to **provide reliable position, navigation and timing services** over India and its neighbourhood.

- **Potential Uses:**

- Terrestrial, aerial and marine navigation;
- Disaster management;
- Vehicle tracking and fleet management (especially for mining and transportation sector);
- Integration with mobile phones;
- Precise timing (as for ATMs and power grids);
- Mapping and geodetic data capture.

- **Other Global Navigational Systems:**

- **BeiDou/BDS** (China)
- **Galileo** (Europe)
- **GLONASS** (Russia)
- **Quasi-Zenith Satellite System (QZSS)** (Japan)

**Source:IE**