



TiHAN: First Autonomous Navigation Facility

Why in News?

Ministry of Science & Technology has inaugurated [“Technology Innovation Hub on Autonomous Navigation” or TiHAN](#), in IIT- Hyderabad, which is a first **“Autonomous Navigation” facility**.

- It is seen as one of the steps toward India’s vision of [‘Atmanibhar Bharat’](#), [‘Skill India’](#) and [‘Digital India’](#).

What is TiHAN?

- It is a **multidisciplinary initiative**, which aims at making India a global player in the futuristic and next-generation **“Smart Mobility” technology**.
- The multi-departmental initiative includes researchers from electrical, computer science, mechanical and aerospace, civil, mathematics.
- At present, **there is no such testbed facility in India to evaluate the autonomous navigation** of vehicles. Therefore, it is envisioned **to address this gap by developing a fully functional and exemplary testbed facility dedicated to Connected Autonomous Vehicles (CAVs)**.
 - Connected vehicles use technology to either communicate with each other, connect with traffic signals, signs, and other road items, or obtain data from a cloud. This information exchange helps with safety and improves traffic flow.

What is the Significance of this Step?

- It will **provide a unique platform for high quality research between academia**, industry and R&D labs both at the national and international level, thus making India a global leader in autonomous navigation technologies.
- India’s mobility sector is one of the world’s largest markets and the TiHAN - IITH **will be the source of futuristic technology generation for autonomous vehicles**.
- The TiHAN-IITH testbed on Autonomous Navigations (Aerial & Terrestrial) will **allow us to test the next generation autonomous navigation technologies accurately** and allow faster technology development and global market penetration.

[Source: MINT](#)