

Advanced Land Navigation System

July 31, 2024 • vajiramandravi.com



About Advanced Land Navigation System:

- It is a **Ring Laser Gyro (RLG)** based navigation system.
- It is used for traversing a path defined by the coordinates of a **military map in ESM format**.
- The system provides Inertial, GPS **and Hybrid Navigation** data for the navigation requirements.
- The system is spoof-proof with high levels of encryption.
- It can be operated in **three different modes**
 - **Inertial Mode:** In this, systems operate completely on the Inertial Sensor Inputs.
 - **Hybrid Mode:** It takes the inputs from inertial sensor as well as GPS receiver and selects the most accurate data for calculations of navigational parameters.
 - **GPS Mode:** In this, system is independent of inertial sensor inputs.
- ALNS Mk-II is compatible with **Indian Regional Navigation Satellite System**, NAVigation using Indian Constellation (IRNSS, NavIC), India in addition to **Global Positioning System (GPS)** and **Global Navigation Satellite System (GLONASS)**.

- The ALNS Mk-II offers compatibility with Defence Series Maps resulting in very high accuracy in navigational applications for AFVs.
 - This equipment will be **procured from Bharat Electronics Limited** (BEL), Chennai under Buy [Indian-Indigenously Designed Developed and Manufactured (IDDM)] category.
-

Q1: What is NavIC?

It is also known as the Indian Regional Navigation Satellite System (IRNSS) is an independent stand-alone indigenous navigation satellite system developed by the Indian Space Research Organisation (ISRO).

Source: DAC clears capital acquisition proposals to enhance the capabilities of Indian Army & Indian Coast Guard

Source: <https://vajiramandravi.com/current-affairs/advanced-land-navigation-system/>

© Vajiram & Ravi. For personal use only.