



## India's First Multimodal Transportation Project Selects Jido As Integral Part

- **Industry:** Transportation
- **Client:** Indian Railways
- **Integrator:** NEC Technologies & VARA Technology
- **Region:** India
- **Solution:** Jido GPS Freight Tracker

### BACKGROUND

The road train is the first multimodal transportation project implemented in India. The road train, which operates as a semi-trailer on the road and a wagon on the rail, can replace up to 55 trucks, drastically reducing costs while shifting freight transport from road to rail. This allows goods to be transported right to the doorstep of businesses. From Melpakkam near the Port of Chennai to Palwal near Delhi NCR, over a distance of 1360 miles (2,200 km), the road train is used to transport cars and automotive parts, electrical and electronic goods, FMCG, retail, furniture, hardware, and parcel services.

### THE CHALLENGE

Indian Railways was looking for an end-to-end system to visualize the cargo being transported in the road trains – a system that could work seamlessly with both trucks and rail

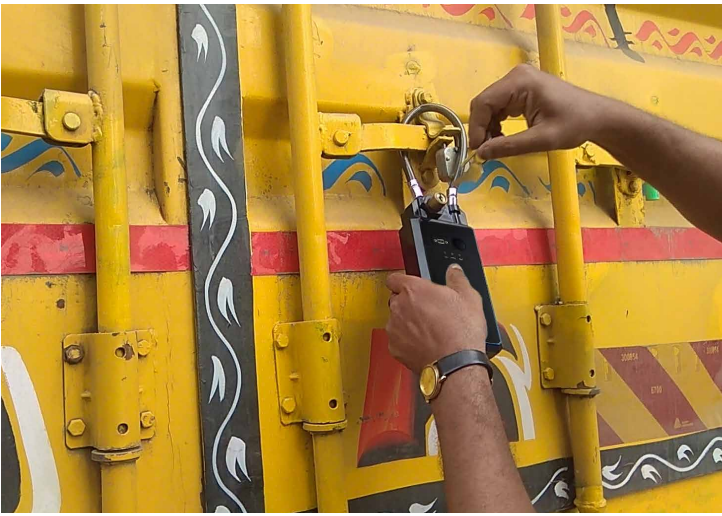
wagons. The railway environment requires ruggedized products and the biggest challenge was that there were no products available that could operate for more than 3 weeks on a single charge. The system had to be flexible and easy to attach and detach. Tracking data had to be error-free, without gaps, since the long route of 1360 miles (2,200 km) covers many states. Real-time alerts and notifications of scheduled and unscheduled stops, route deviations, or excessive delays were a requirement for Indian Railways.

Most importantly, Indian Railways wanted to be alerted when a container is opened without authorization, as the route passes through unpopulated areas and is prone to theft.

### THE SOLUTION

Kirloskar Pneumatic – which produces the road trains – and its technology partners NEC Technologies and Vara Technology conducted a comprehensive study of the possible tracking and monitoring solutions for this mission-critical project. The company chose Black Box's JIDO GPS Freight Tracking Device as the most ideal solution that met all of their requirements and key criteria.

Each of the road trains has a JIDO tracking device as an integral part of the system. JIDO's dual SIM card helped with seamless location tracking, its dual charging capability facilitated the flexible attachment of JIDO for both road transport in trucks and rail transport in wagons, and real-time alerts were accurately generated from the geo-fence areas created along the routes.



In addition, JIDO's long-lasting battery can operate for a month on a single charge, so even if there were long delays along the route, tracking was never an issue.

JIDO has a smart lock system, which can only be opened by an authorized person who has its key. In the event of unauthorized opening of the container, opening of the container in a place not intended for loading or unloading cargo, or any attempt to tamper with the container or JIDO, an alert goes out immediately to Indian Railways with all the details, including the location and road train number.

## RESULTS

After the initial pilot, the system was perfected, people were trained, and the road train project was put into operation with much fanfare and media attention. According to officials, road trains will reduce road maintenance costs and minimize both noise and air pollution. While these trains will prove to be of great use once the dedicated freight corridor is completed, JIDO has made history with India's first multimodal transportation system.