

# Cyber Signalling for Goods Yards/Terminals/Coaching Depots/Sidings

## - Safe, Scalable and Smart



### Background:

Yard Masters/Controllers do not get any visibility from Goods Yards/Terminals/Coaching Depots/Sidings. Commands are given orally & operated locally and feedback also comes orally. Real time information is not available and decision making is slow and hard. Hence, Operations are not efficient and huge loss of productivity.

**Introduction:** Cyber Signalling is innovated by IISc Startup to give live map of the entire yard through wireless device to give information to Controller/Yard Master/Train Crew. The same wireless device can be used to operate points safely while in move. Cyber signalling can also send the alerts to TRAIN CREW and also warn before a train arrival though. This technology can also give information whether it is a loaded train or an empty train and how long it is waiting in the same place.

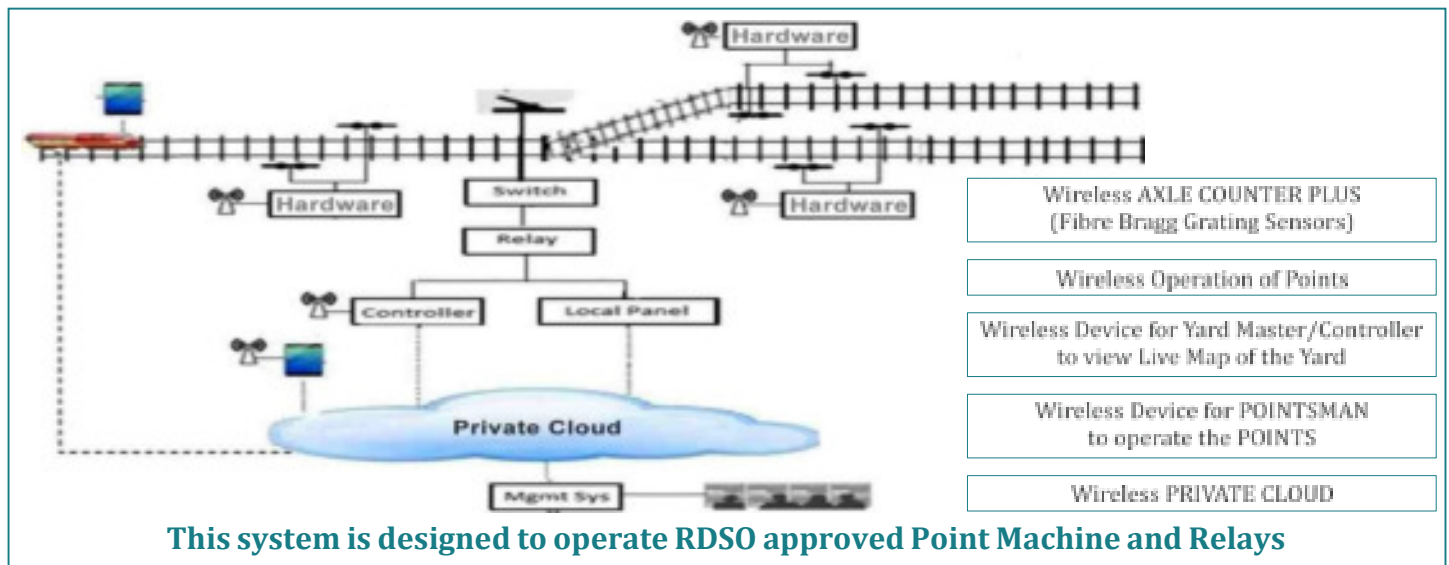
24x7 Remote viewing of operations, is possible to the persons in HQ.

Data is stored for every movement and play back option is available to view all the operations in last 72hrs. Any yard will become DIGITAL RAILWAY YARD, if equipped with Cyber Signalling.

This INNOVATION is deployed and operational within INDIA.

THIS IS FIRST TIME IN INDIA AND ALSO WORLD.

RAIL INNOVATIONS IN INDIA FOR INDIA AND TO THE WORLD.

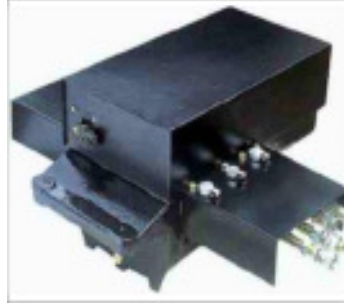


### Features of CSS :

- Flexibility in Operations (Operate when in move)
- Real Time Information to all who could be stationary or in the move – facilitates report generation and decision making.
- Ease of operation
- Modular – easy to scale
- Availability of data in the cloud
- Secure against unauthorized operation using login ID and password protection
- Positive proving of point status

### Benefits:

- Information to all through Smart hand held devices
- Wireless Operation by authorised persons
- Avoids derailments due to improper point operation in non-interlocked yards
- Improves asset utilization
- Helps to analyse and identify inefficiencies in the system
- Helps decision making



**About Lab to Market:** This Company is seed funded by Indian Institute of Science (IISc), India to innovate Next Generation Technologies to make **Railways Safe and Efficient.**

**Lab to Market Innovations Private Limited**

**Entrepreneurship Centre**

society for Innovation & Development  
 Indian Institute of Science, Bengaluru 560 012 INDIA  
 T +91 9496804365, +91 9741090672  
 www.l2mrail.com Email: office@l2mrail.com

