Cyber Signalling System (CSS)
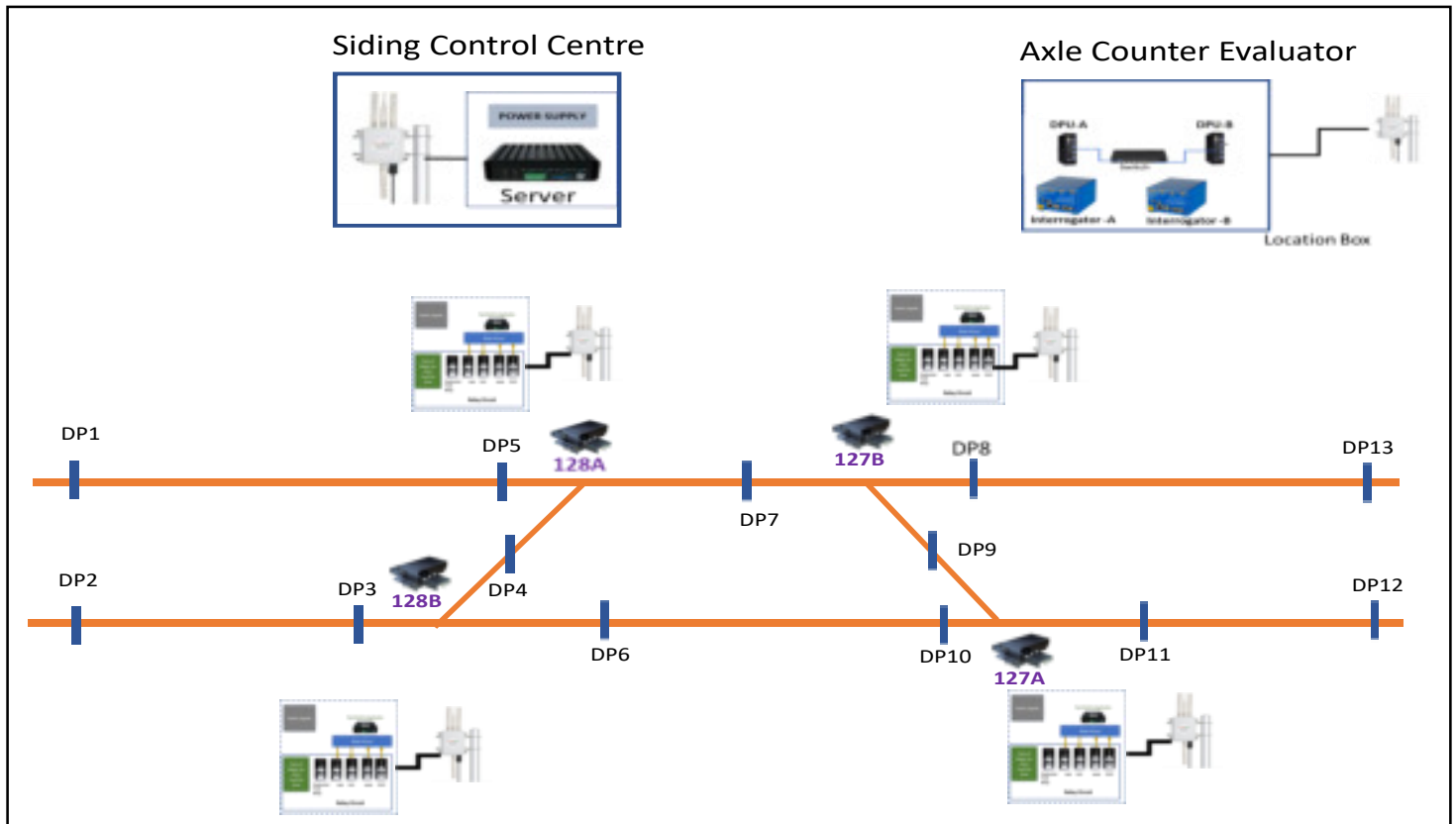## - Safe, Scalable and Smart

Background:

Cyber Signalling System (CSS) is designed and developed to meet railway siding requirements. One of the main requirements of railway siding requirement is decentralization of control to support multiple operators who could be on the move.

Introduction:

Cyber Signalling is cloud based. All the sub-systems would be connected to Cloud Server through RAN (Radio Access Network). All the data is stored in Private Cloud to provide real time information to authorized personnel. This Private cloud is also situated in the same place of railway siding, All authorized users can control the train operations by using mobile HMI or Fixed HMI devices. Train Pilots canview entire yard and receive the alerts/warnings.

Features of CSS :

- Flexibility in Operations (Operate when in move)
- Real Time Information to all who could be stationery 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 analyses and identify inefficiencies in the system
- Helps decision making

About Lab to Market: This Company is seed funded by Indian Institute of Science (IISc), Bengaluru, India to innovate next generation Technologies to make Railways safe and efficient.