

# Len's Solution to Digitalize Railway in Indonesia



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Ir. LINUS ANDOR MULANA SIJABAT,  
IPM, FIRSE.  
Director Operation 1  
PT Len Industri (Persero)





# OUTLINE



Mainline  
Railway



LRT Palembang



LRT Jakarta



Sky Train



## Mechanical Interlocking



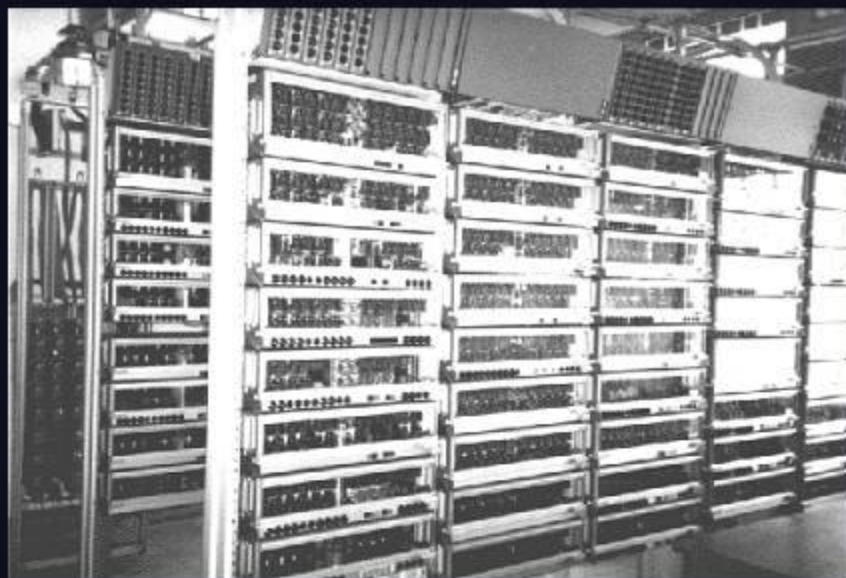
## Electrical Interlocking



## Mainline Railway

Digitalization of Mechanical Interlocking into Electrical Interlocking

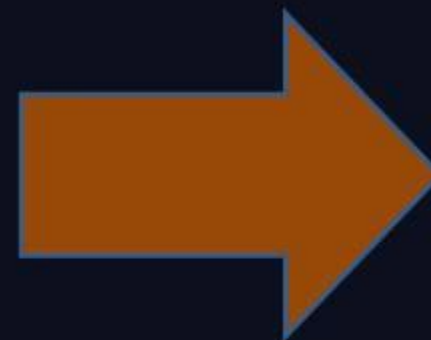




RRI MIS-801



DrS-60

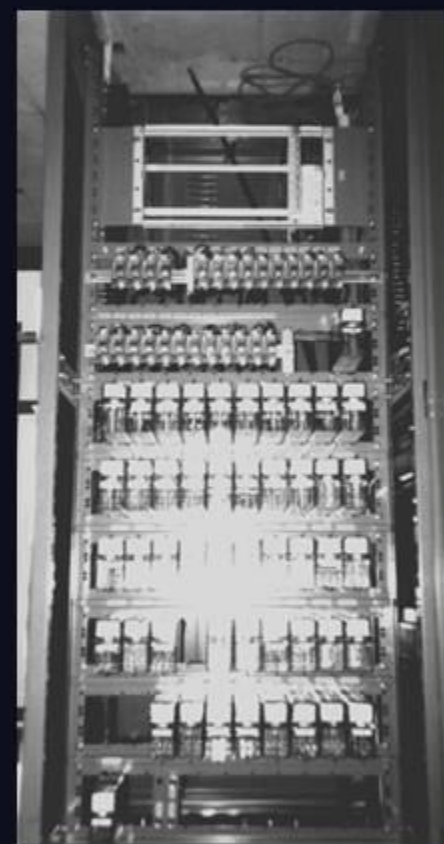


**SiL Safe**

**Len Interlocking based  
on Safety Open Platform,  
SIL-4**



“Len is the pioneer of  
using safety open  
platform in Indonesia...”



Westrace



Hybrid GL-1



VPI

# Mainline Railway

Digitalization of Obsolete Interlocking into SIL-4 Interlocking



## CTS – Surabaya



## CTS – Semarang

# Mainline Railway

Digitalization of Centralized Traffic Supervisor





**LRT Palembang**

# LRT Palembang

Digitalization of Operation Facility Using Train Control

**Signal**



**Track Balise**



**Point Machine**



**Axle Counter**





**SIL-4 Certified  
OBU**



**SiLVue – Office Control Center**



## **LRT Palembang**

Digitalization of Operation Facility Using Train Control



## SiLVue – Office Control Center



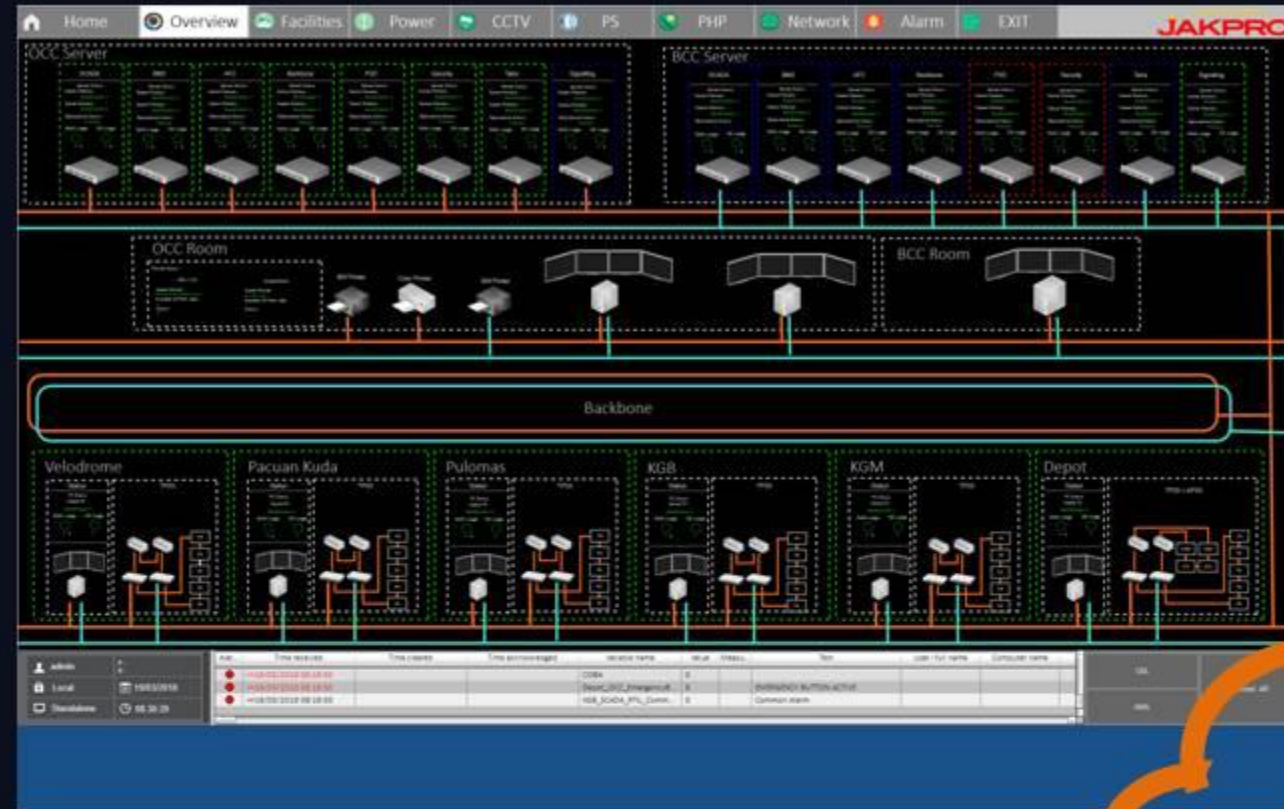
**LRT Jakarta**  
Digitalization of Integrated SCADA SIL-2

**PC Console**

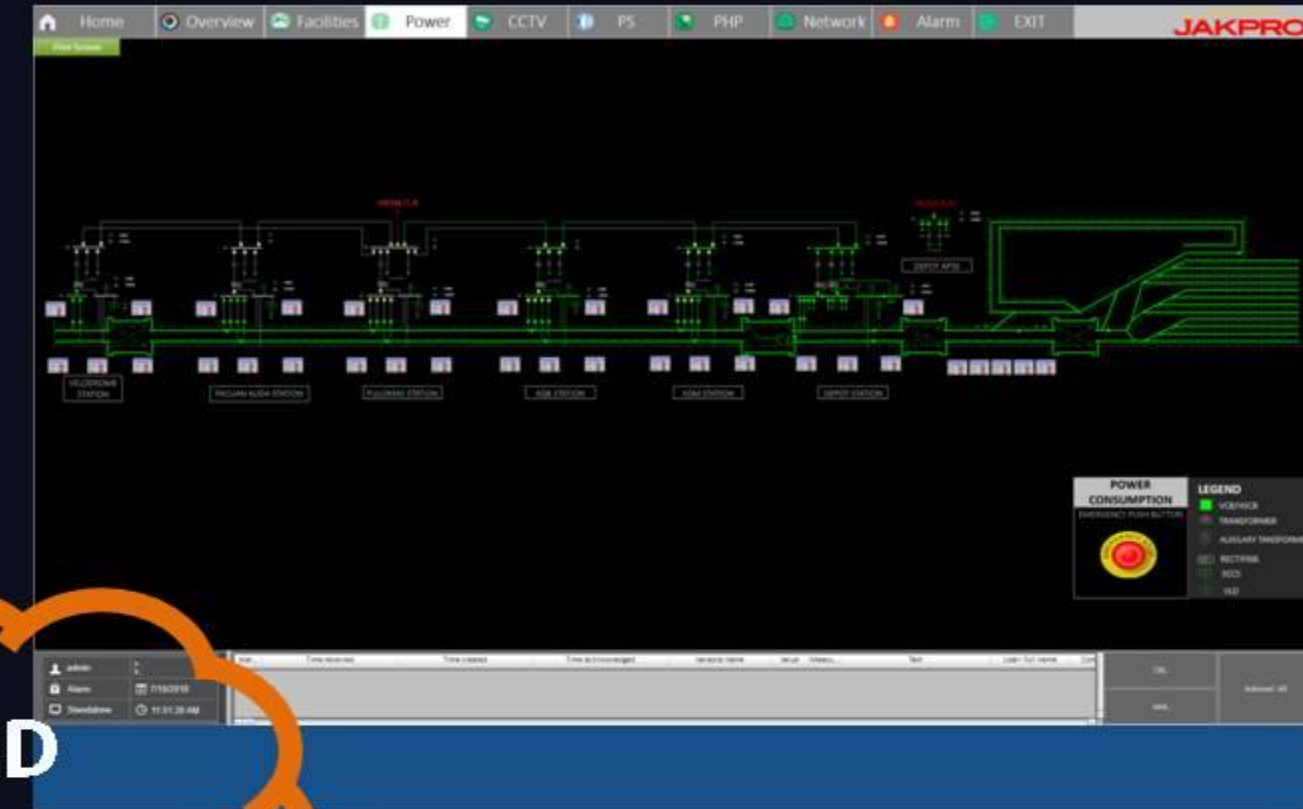




## SCADA – Network



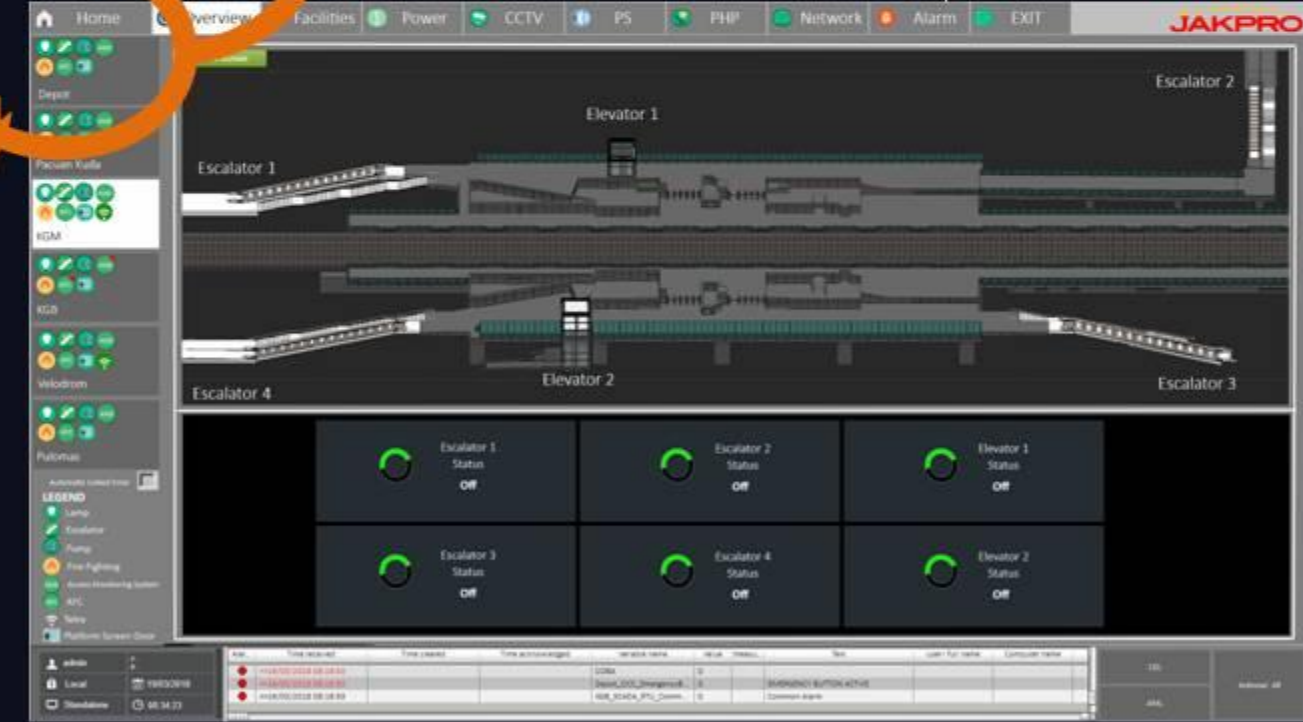
## SCADA – Power System



## SCADA – PSD



## SCADA – Facility



INTEGRATED  
SCADA  
SIL-2

**LRT Jakarta**  
Digitalization of Integrated SCADA SIL-2





## SiLMove Train Control – GOA 4



**SIL-4  
VOBC  
Using Safety  
Open  
Platform**

**APMS**

Digitalization of Route Control & Train Control



## SiLVue – Office Control Center



## SiLSafe – SIL-4 Interlocking Using Safety Open Platform

# APMS

## Digitalization of Route Control & Train Control





**“Len is the solution for railway digitalization in Indonesia”**

- **Digitalization can make railway integration and accessibility more optimal and efficient.**
- **With lot of option for railway, such as LRT and MRT, interconnection system is mandatory to make the travel easier and more comfortable.**
- **Indonesia definitely need total digitalization for railway.**



**Len Industri**

Transportation Business