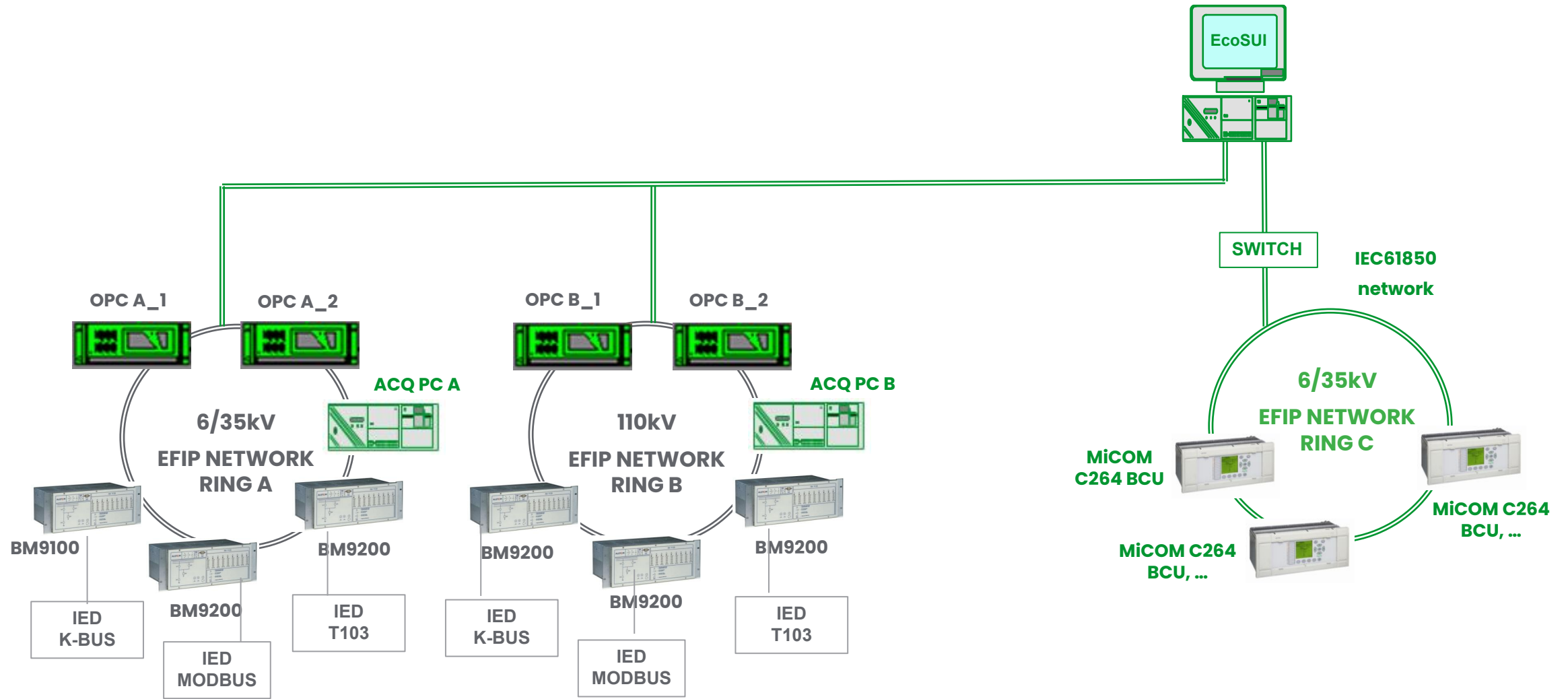


# KARACHAGANAK UPGRADE PROPOSAL 2017

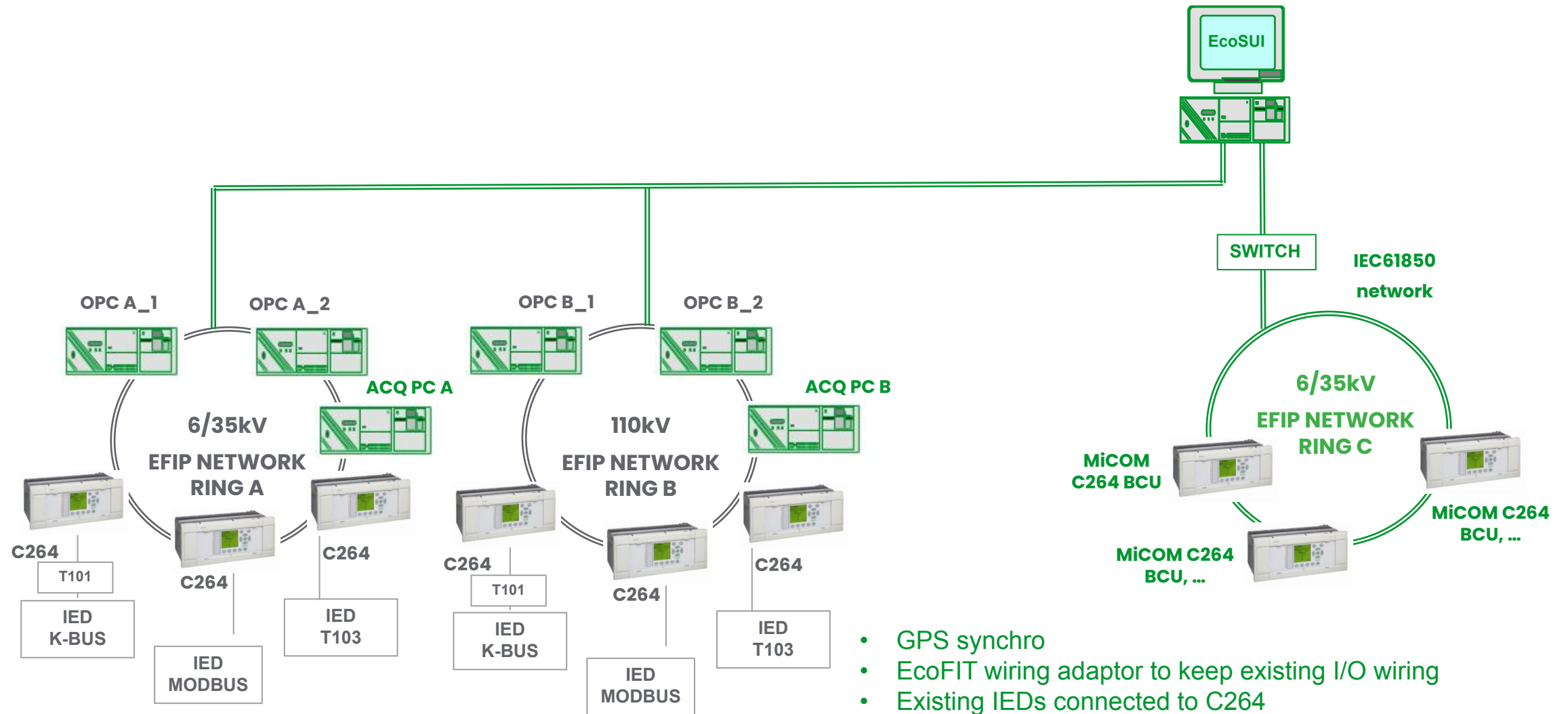
November 24<sup>th</sup>, 2017  
Schneider Electric France  
Energy Automation  
Lattes



# Current situation

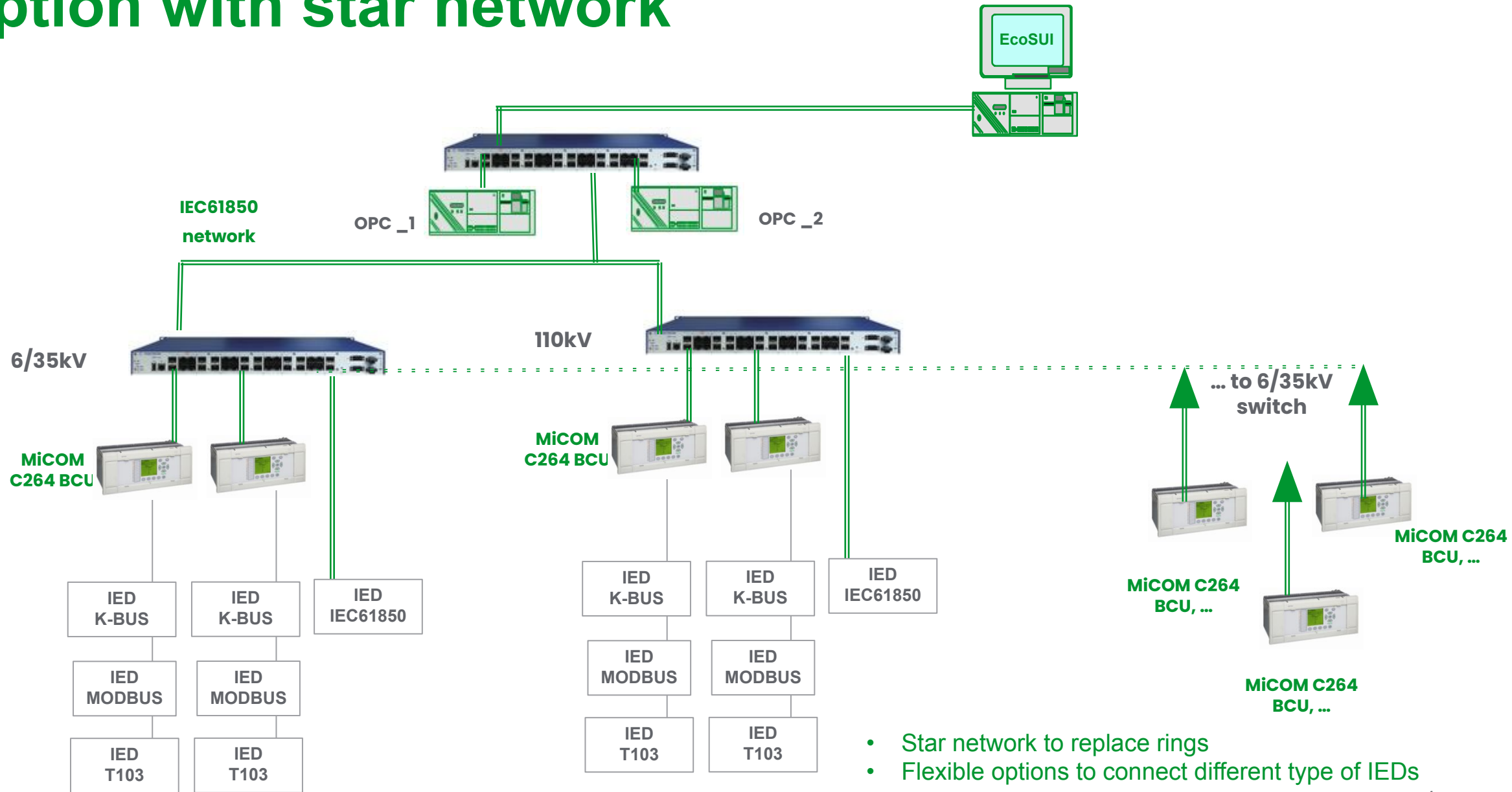


# Option with keeping rings and current IEDs



- GPS synchro
- EcoFIT wiring adaptor to keep existing I/O wiring
- Existing IEDs connected to C264
- To connect K-BUS: converter to T101
- 4 new gateways

# Option with star network



- Star network to replace rings
- Flexible options to connect different type of IEDs

# Option with star network and IEC61850

