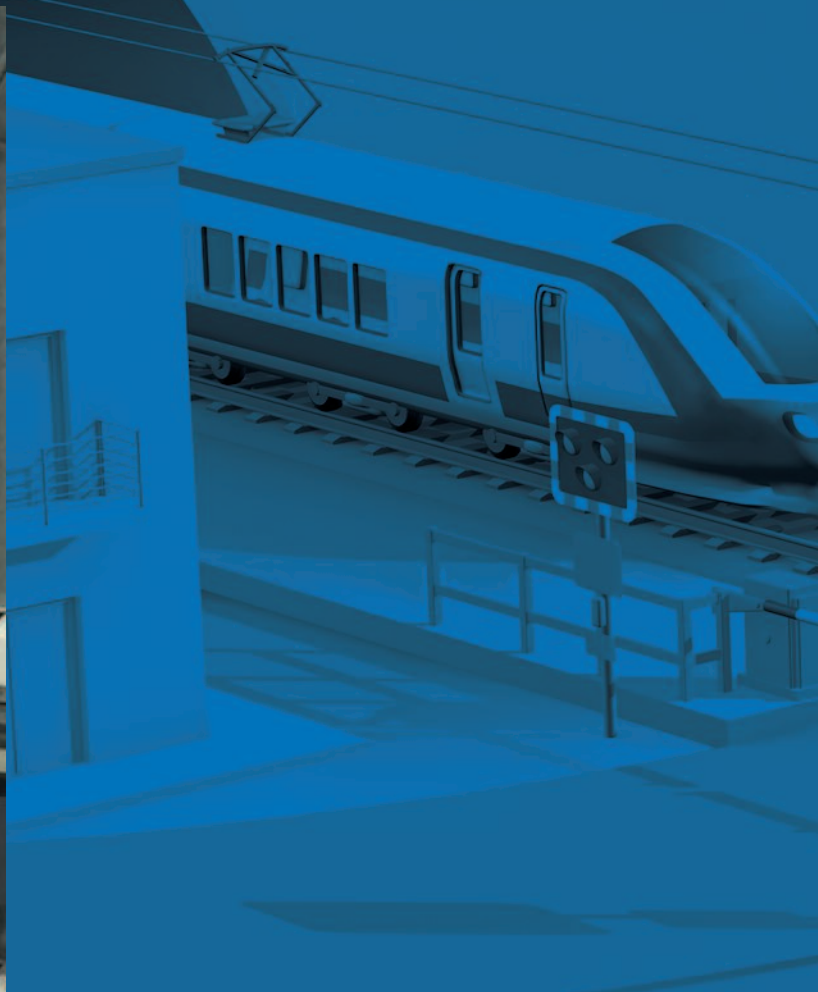
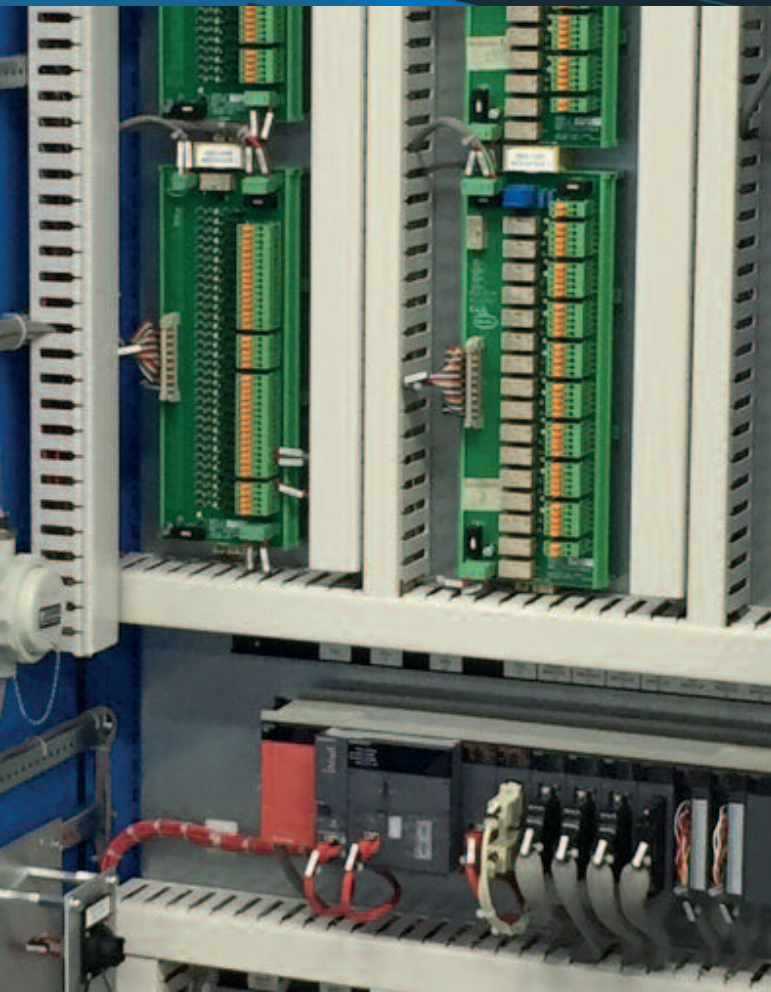


TRACTION POWER SCADA



SELLA
CONTROLS

...technology for integration, management and control...

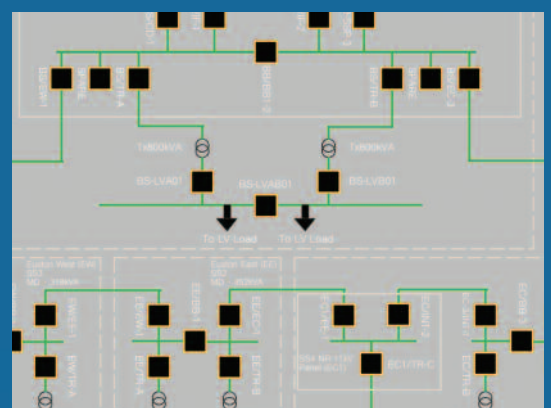


Substation Control & Automation

Substation control and automation is enabled via a TRACKLINK® RTU or the integration to 3rd party equipment.

Control is provided using traditional hardwired I/O or modern substation automation protocols. Extensive software tools allow interfacing to intelligent switches to monitor network performance. Key features and benefits are:

- Scalable I/O Configurations
- Multiple Protocol Implementation
- Future Proof Design
- Interchangeable Modules to Reduce Downtime
- Flexible Compact Enclosure Design
- Fully Integrated Local HMI
- Remote I/O Architecture
- Effective Maintenance/Spares Requirements





Remote Securing Capability

Remote Securing Capability is provided by integrating TRACKLINK® P₂P or 3rd party controllers. Installed into specialist Negative Short Circuit Devices, electrical sections can be remotely isolated.

Once in place, ownership of the isolation is transferred to the nominated person and returned on release. Key Features of this facility are:

- Modern Safe Method of Isolation
- Improved Track Access Time
- Mobile Device compatible PANO® APP
- Industry Standard Controller
 - Powerful Universal Processor
 - Fully Configurable I/O
 - Serial & IP Network Configurations

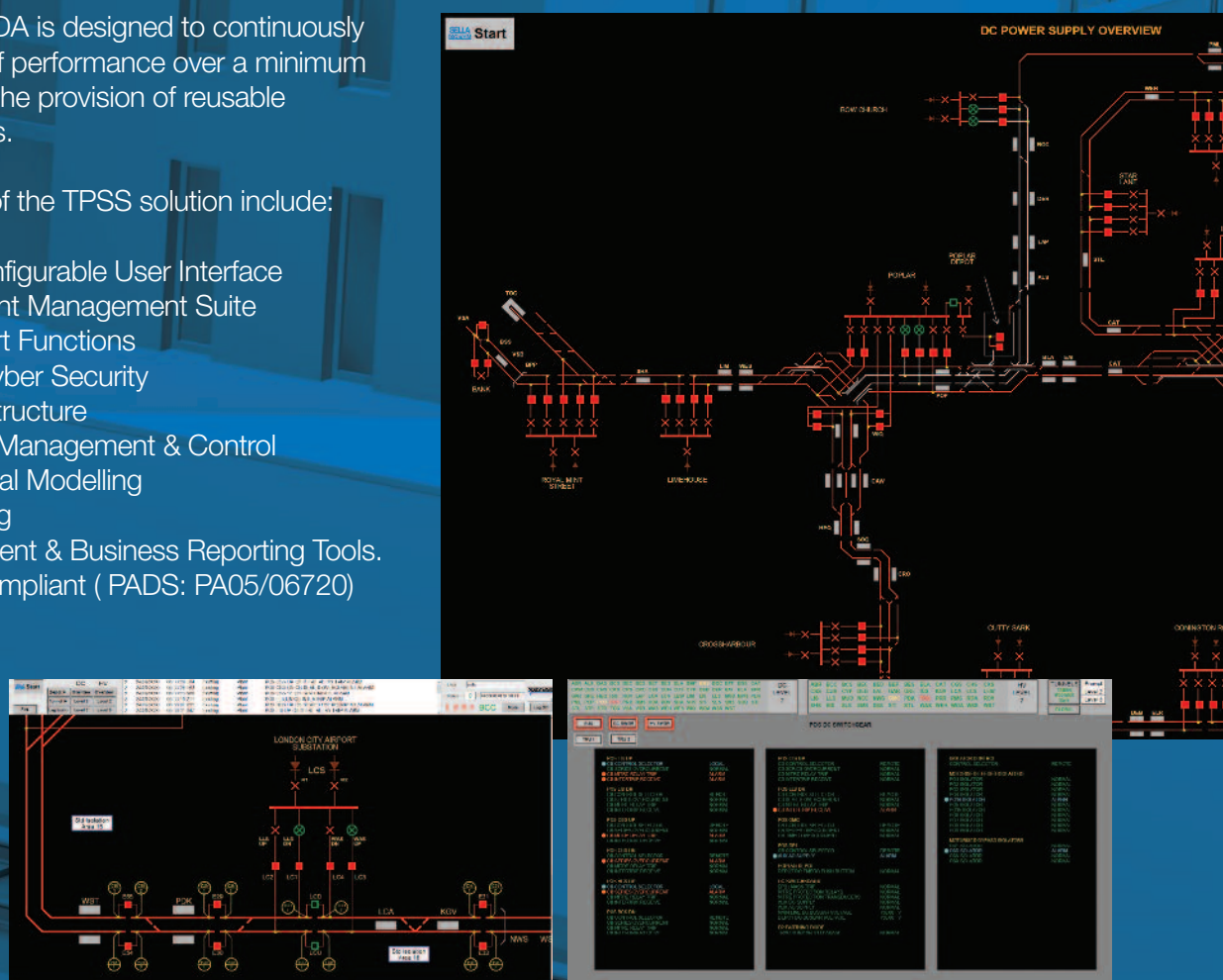


Traction Power Control

TRACKLINK® SCADA is designed to continuously deliver high levels of performance over a minimum design life through the provision of reusable application modules.

Standard features of the TPSS solution include:

- Simple/Fully Configurable User Interface
- Full Alarm & Event Management Suite
- Decision Support Functions
- IEC Standard Cyber Security
- Modular Build Structure
- Effective Power Management & Control
- Network Electrical Modelling
- Remote Securing
- Asset Management & Business Reporting Tools.
- Network Rail Compliant (PADS: PA05/06720)



Electrical Network Modelling

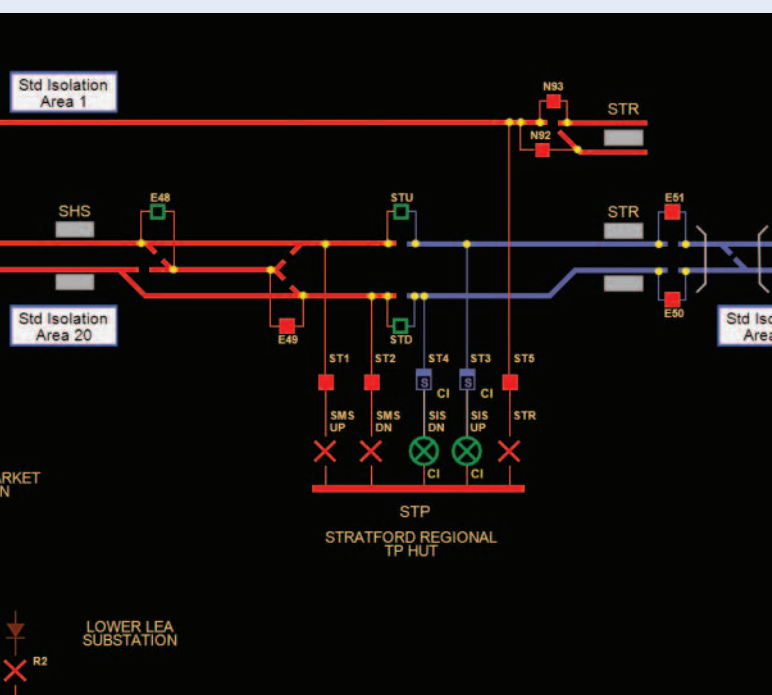
TRACKLINK® SCADA can provide full Electrical Modelling and Network Management capability.

In the 'LIVE' mode, the primary function of the TPSS is to derive the state of power sections and sub sections. This allows operators to monitor the state of the network using isolation mimics.

In the 'PLANNING' mode, the user can test the effect of an isolation, sequences of isolations or individual switching operations. Key features include:

- Desired Feeding Arrangements
- Electrical Network Modelling
- Pre Planned Isolation Scenarios
- Switching Sequence 'What If' Testing
- Integration with Business Tools

SELLA CONTROLS' TRACKLINK® Traction Power SCADA Solution (TPSS) facilitates effective energy management for rail electrification. Its architecture is based on an industry standard design, which delivers the modern control and energy management of traction power using the latest technology suitable for Rail applications.



TPSS utilises existing industry-standard, robust communications protocols within its application to provide the required data communications connectivity to SCADA related electrification assets and plant.

TPSS uses the functionality of TRACKLINK® SCADA, which has been developed on a COTS software platform. It can be deployed as simple local substation control solution or as centralised power control and energy management solution. It features a true client-server based architecture utilising single and multiple server installations.

TRACKLINK® SCADA is an event driven application, very efficient and is highly flexible in its architecture and design.

It can be built with data acquisition redundancy (SCADA servers and data communications links) and data security mechanisms (Whitelisting and Secure Authentication), within secure environments.

Power Management & Control

TPSS provides the effective Power Management and Control of electrified rail networks. Utilising the flexible user interface and open systems architecture of TRACKLINK® SCADA, it provides electrical operators with a modern HMI to control and monitor electrical power over a wide geographical area.

TPSS has full compatibility with all modern protocols including IEC 61850, DNP3/IP, Serial DNP3 and legacy interfaces. Its configurable database structure and extensive Alarm and Events Management capability provides immediate access to operators for the safe and effective monitoring and control of plant. Reporting tools and trending provide predictive analysis of plant to ensure effective energy management.

Events are archived centrally and utilised by TRACKLINK® SCADA and its Network Management System (NMS) to provide 'Live' and 'Historical Data' supporting network operators in their daily activities whilst additionally providing accurate and detailed reports.

TPSS updates can be carried out on site or remotely reducing extensive pre commissioning activities. An offline simulator provides direct access for training and simulation models.

Network Modelling

Embedded within TRACKLINK® SCADA is its Network Modelling Suite. This is designed to support simulation and planning of electrical power networks. The model contains tools to analyse, plan, execute and manage the electrical network. LIVE and PLANNING modes of operation allow any desired sequence of switching to be constructed, pre-planned, edited and stored for future use on the live system.

Enhanced features provide the ability to deliver network management for pre-planned isolations, engineering maintenance and fast effective emergency outages.

Remote Securing

As an enhancement to TPSS or as a standalone solution, the TRACKLINK® SCADA application can provide safe and secure control of isolations using its Remote Securing feature.

Electrical Operators are able to secure an electrical section and then transfer ownership of the electrical section to the nominated person on site using the PANO® APP installed on a mobile device.

Remote Securing enables a safe, effective and faster method of applying an isolation, protecting engineering teams and avoiding unnecessary track walks.

Sella Controls Ltd

Carrington Field Street
Stockport, Cheshire
SK1 3JN
United Kingdom

Tel: +44 (0)161 429 4500

Fax: +44 (0)161 476 3095

Email: sales@sellacontrols.com

www.sellacontrols.com

