Based upon our successful WESTRACE Technology Siemens have developed a new Lx Controller solution. By taking proven WESTRACE technology that has been applied on worldwide projects and creating new application techniques, Siemens is reducing the cost of modernising Level Crossings while still delivering SIL 4 safety.

The use of WESTRACE Lx Controllers eliminates the use of tradition Relays resulting in cost reductions in both installation, commissioning and ongoing maintenance. WESTRACE has high availability and reliability proven on Network Rail infrastructure over recent years. WESTRACE Lx Controllers offer reductions in Whole Life Costs through lower spare parts for maintainers. A Technicians facility is an available option and this cost further reduces set up times and maintenance fault finding.

The WESTRACE Lx Controller equipment can be packaged in a stand alone, plug coupled, Mini Equipment Housing (MEH). MEH footprints offer approximately 40% saving over a traditional Level Crossing REB housing conventional Relays. When space is critical then WESTRACE Lx Controllers can be integrated adjacent to existing equipment.

**Benefits**

- Proven Hardware
- Innovative Application Process
- Dual Redundant WESTRACE Processor
- Compatible with current UK Level Crossing Barriers
- Advanced Diagnostics and simplified Maintenance
- Compatible with 50V lineside circuits and Interlockings
- ETCS Ready
- Off-Site Testable
- High Reliability
- Reduced installation when compared with relay solution
- Remote Condition Monitoring option
- Minimal Maintainence
- Minimal Modification to Existing track
- OPEX Savings
Siemens has commissioned the Westrace based Level Crossing Controllers’ in the following configurations:

- MCB-OD
- MCB-CCTV
- AHBC

The cables connecting the level crossing equipment (barrier machines, road lights etc) to the Level Crossing Controller are plug coupled. This gives savings in Design, Civils, Installation and Testing.

The Westrace Crossing Controller and MEH have enabled Siemens to carry a significant amount of Level Crossing testing off site. The data collected so far indicates a shift in ratio of off-site to on-site testing from 30:70 to 60:40.

A benefit of the Solid State Level Crossing Controller is the Technician’s facilities with comprehensive diagnostic reporting. The Technician’s facilities are available both at the Crossing, and remotely at the Control Centre. This feature is an advantage during pre-commissioning with the majority of the Crossing Controls / functions being available whilst service trains can be observed to provide real time data for verification of timings, otherwise this would only be achievable under possession.

Siemens also offer the S60 Barrier Machine. More information can be found in the S60 Level crossing Barrier Machine data sheet.

References

North Lincs Project - 16 WESTRACE Level Crossing Controllers

GNGE Project - 35 WESTRACE Level Crossing Controllers