

# Trainee's Project Report

Job Code	EN4470
Department	EN
Discipline	Electrical Engineering
Supervisor	INFANTE Sonia

## Description

The candidate will be part of the renovation project of the SCADA (Supervisory Control and Data Acquisition) and DMS (Distributed Management System) system for the monitoring and control of CERN electrical networks. In the coming months, the Control Section of the Electrical Group will replace its Network Control Centre, with over 13,000 monitored electrical equipment, 200 user interface panels, several user specific application programs, software links with external systems, topology processor for network connectivity, web interface and other typical SCADA applications. The selected candidate will be involved in the development of user interface panels for single line diagrams with dynamic coloring according to voltage level, energy state or energy source, device state and system state summaries, configuration of electrical devices and network elements in terms of electrical characteristics, connectivity and field related information. The candidate may be also involved in program development in C language.

## Special Requirements

The ideal candidate is an electrical engineer with very good knowledge of power networks, high and low voltage electrical systems and skills in ergonomic design of GUIs. Experience in industrial control systems and SCADA systems configuration is an advantage. Good knowledge of English/French language.

## Training Value

The candidate will acquire deep understanding of CERN electrical networks, from 400kV to 48VDC and will gain good experience in SCADA system configuration, databases and software tools development.

