

# Trainee's Project Report

Job Code	EN4467
Department	EN
Discipline	Electrical Engineering
Supervisor	RICCI Daniel

## Description

The Cabling and Optical Fibres Section in the Electrical Engineering Group is responsible for the supply, installation, test and maintenance of optical fibre cabling systems at CERN. These include the main accelerators (LHC, SPS, PS), general infrastructure and Experiments (CMS, LHCb, ALICE). Installation is carried out by external industrial support contractor. The candidate joining the Section, will be asked to actively participate to the optical fibre installation activities including: collection of fibre installation requests from CERN users; study of possible technical solutions; budget estimation and preparation of the technical documentation for the work execution; follow up with the contractor during all installation phases (including frequent worksite interactions); assess the final installation quality; participate in tests and troubleshooting activities when necessary.

It is expected to progressively acquire the capacity of dealing with installation projects of increasing complexity. The activity requires willingness to work on-site (machine tunnels, galleries, experimental areas, etc.) and very good team working attitude.

## Special Requirements

The candidate shall have a University Degree in Electrical Engineering. Good knowledge in the Telecommunications area, especially: Optical cabling system design and implementation techniques; Optical transmission fundamentals; Modern programming techniques and simulation design software.

## Training Value

The candidate will develop competences in the domain of project and implementation of fiber optic networks. The frequent contacts and discussions with external contractors will allow the candidate to get acquainted with the industrial environment. Finally, the work in a bilingual environment, will allow him to improve his communication skills in both English and French.

