



# Development of new modular software applications for permanent positioning control and alignment systems (PCAS)

Code	EN7464
Programme	FCT
Department	EN
Responsible	26065 - Mr. Dominique Missiaen
Title	
Development of new modular software applications for permanent positioning control and alignment systems (PCAS)	
Description	
<p>The Survey team uses in-house software for data capture and data processing. The team supporting the software applications is responsible for their maintenance, refactoring and development. This support and development is essential to the field and office activities related to the Survey team's industrial metrology work.</p> <p>Currently the Survey team is responsible for two permanent PCAS :</p> <p>A permanent high accuracy PCAS to determine and maintain the co-linearity between inner triplets magnets in the LHC</p> <p>A PCAS for the Supra Cavities and Solenoids in the Cryomodules in HIE-Isolde</p> <p>The High Luminosity LHC (HL-LHC) project also needs a new system to be developed.</p> <p>The candidate will develop new java based modules to manage and process data from the different sensors used in the existing and known future PCAS. They will then integrate these into a new application, with a web-based interface, to homogenize and replace the two existing systems (one developed in PL/SQL, the other one in java).</p> <p>Project computing knowledge : Java, Spring, web development, web sockets, Restful API, Angular</p>	
Skills	
Information Technologies: Building web applications (e.g. with jQuery, HTML5), Using software development tools (e.g. Git, Jira, Trac). Programming Languages: Java, SQL, PL/SQL or similar Spring, Spring Boot, web sockets, Restful API, Angular	
Disciplines	
Information Technologies	

To edit this project go to [https://hrapps.cern.ch/auth/f?p=131:4:::::P4\\_ID:7464](https://hrapps.cern.ch/auth/f?p=131:4:::::P4_ID:7464)