**Main scope**

* Define the software and architecture design guidelines and coordinate the development team to fulfill customer functional requirements.
* Deliver TMS projects on time, on budget and with quality.
* Improve our TMS product.

**Main responsibilities**

* Write software documentation of the TMS product and verify software documents written by others according to the software lifecycle
* Perform different kind of software tests (e.g. confidence test, functional tests)
* Work with all the stakeholders (customers, users, project managers, developers, etc) to define product requirements (functional and non-functional requirements, software requirements, etc)
* Define work packages for external consultants and perform acceptance and quality checks on their deliveries, according to given requirements
* Supporting the installation, test and commissioning phases
* Supporting the requests received by ongoing projects
* Supporting the Sale and Bid teams with requirement analysis, hours estimation and list of materials
* Take control of evolving versions and baselines of software, documentation and configuration.
* Contribute to define the software architecture
* Support in defining the main technical choices for SW development

**Educational Requirements**  
Educated to University Master Degree level in Electronics Engineering, Information Technology, Computer Science, Math or Physics. PhD is a plus.

**Behavioral skills**

* Passion for details, precision and high quality, honesty and integrity
* Deep analysis skills with strong desire to look for the most effective and yet simplest solution to complex problems
* Flexibility and ability to work in changing environments
* Keen on self-improvement and self-training with continuous personal study and research
* Troubleshooting skills and ability to work autonomously
* Very good relational and communication skills
* Be a team player
* Experience with working in an international and multicultural environment is a plus

**Software design leader (enterprise architecture oriented)**

***Essential:***

* 3-4 years of experience with complex enterprise software developments, preferably in a Linux environment
* Knowledge of software programming languages: C++, Java
* Knowledge of message oriented software architectures and Enterprise Integration Patterns
* Knowledge of software modeling with UML, SysML
* Knowledge of Linux Operating Systems and virtualization techniques
* Knowledge of IP networking and routing
* Knowledge of SQL relational databases
* Fluent in English
* Available for short / medium (up to a few weeks) business trips abroad

***Desirable:***

* Experience in the railway industry
* Experience with CENELEC railway standards and software lifecycle management
* Experience with SIL certification
* Knowledge of software programming language: Javascript, Dart, Scala, C, Ruby
* Knowledge of web software development

**Software design leader (web oriented)**

***Essential:***

* 3-4 years of experience in web software developments, preferably in a Linux environment
* Knowledge of web based development and distributed architectures
* Knowledge of software programming languages: C++, Java
* Confidence with the Linux Operating System
* Knowledge of software modeling with UML, SysML
* Knowledge of IP networking and routing
* Knowledge of SQL relational databases
* Fluent in English
* Available for short / medium (up to a few weeks) business trips abroad

***Desirable:***

* Experience in the railway industry
* Experience with CENELEC railway standards and software lifecycle management
* Experience with SIL certification
* Knowledge of message oriented software architectures and Enterprise Integration Patterns
* Knowledge of cyber security techniques

**Software design leader (operational research and optimization** **oriented)**

***Essential:***

* Master degree in Engineering, preferably with top marks (other scientific degrees of equivalent level, e.g. Math and Physics, might be acceptable as well)
* Knowledge of operational research and optimization algorithms
* Confidence with the Linux Operating System
* Knowledge of software modeling with UML, SysML
* Knowledge of IP networking, routing and SQL relational databases
* Fluent in English
* Available for short / medium (up to a few weeks) business trips abroad

***Desirable:***

* Experience in the railway industry
* Experience with CENELEC railway standards and software lifecycle management
* Knowledge of software programming languages: C++, Java
* Knowledge of message oriented software architectures and Enterprise Integration Patterns
* Knowledge of SQL relational databases