

# Sûreté et sécurité de fonctionnement des systèmes critiques



### Villeurbanne, mardi 20 octobre 2015

## Introduction des automates génériques industriels dans les applications sécuritaires ferroviaires

### **COTS** safety PLC introduction in safety railway application

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**Mots clés :** Railway, commercial of the shelf, safety application engineering, diagnostic coverage, safety defense, rolling stock application

This presentation is divided in three parts:

- Presentation of the complete HIMA system by using industrial safety controllers, incl. hardware, OS, communication and programming tool. The whole HIMA system is certified (up to SIL4 CENELEC), all requirements (e.g. fault tolerance) are covered into it and it is not in the responsibility of the user.
- Presentation of the internal structure of HIMA controllers to explain that fault tolerance is an important part of SAFETY systems.
- Presentation of the "Reuschling" railway project (rolling stock): Introduction of the "Reuschling" railway project as a SIL3 project, which is developed to reach SIL4 if the standards stipulate it.