

# MERgE

## Multi–Concerns Interactions System Engineering

### PROJECT SUMMARY

Increasing number of systems must comply with both safety & security requirements. There are no unified tools and methods for these domains. MERgE will provide a new framework to bridge the gap and thus aiding developers, regulators and end users comply with existing and future requirements.

### OBJECTIVES

- Advanced SE concepts and tools for combining safety & security requirements and standards – validated/ demonstrated in the selected industrial application domains.
- Traceability of design decisions.
- Automated test generation for testing the robustness of safety and security critical SW

### UNIQUE SELLING POINTS / BUSINESS VALUE

- The results will be key enablers for the evolution of engineering practices and methodologies.
- Reduce time-to-market of new products by avoiding costly re-certification.
- Faster evolution of standards - higher levels of safety & security in systems.
- EU leadership for automated model-based security tests in safety critical networks

### EXPECTED RESULTS

- A multi-concern framework including safety & security.
- New development and testing tools (including fuzzing).
- Contribution to standards; ISO/IEC, IETF, IAEA, OASIS, SPEM, UML, SysML

