

DEPENDABLE TECHNOLOGIES FOR CRITICAL SYSTEMS



INDEPENDENT SAFETY ASSESSMENT OF RAILWAY SYSTEMS

REDUCE TIME-TO-MARKET AND DEVELOPMENT RISKS OF
SAFETY-CRITICAL PRODUCTS AND SOLUTIONS

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SAFETY ASSESSMENT SERVICES FOR RAILWAY EMBEDDED SYSTEMS

The most common method of demonstrating the safety of railway systems (such as locomotive control systems and track signaling systems) is to carry out an Independent Safety Assessment (ISA).

ISA complies with the functional safety requirements of IEC 61508 and the specific railway standards EN 50126, EN 50128 and EN 50129.

CRITICAL SOFTWARE'S SERVICES

CRITICAL Software offers a full spectrum of ISA-related activities to the railway industry. We assume responsibility for all the deliverables we commit to.

Our engineers are highly experienced in all relevant methods in the railway ISA domain.

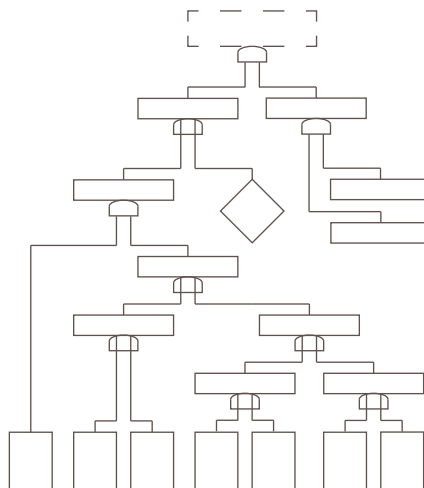
CRITICAL Software can deliver:

- Functional safety analysis services;
- Reliability, Maintainability, Availability and Safety (RAMS) tailored services;
- Independent verification & validation services, including system testing up to SIL-4.

CRITICAL Software delivers complete ISA services tailored to fit the needs of different systems. In the RAMS domain, we determine SIL, RAMS analysis and RAMS predictions through RBD, FTAs, FME(C)As, HA/HAZOPs, HSIA and HDA (among other system-specific activities).

Development is the core of CRITICAL Software. We have developed more than 2,000,000 high-integrity lines of source code and we have wide experience in developing safety-critical embedded real-time railway applications and implementation according to EN 5012x standards.

FAULT TREE ANALYSIS



BENEFITS

- More than 10 years experience in ISA and RAMS safety-critical applications;
- Close team integration: deployment and integration of CRITICAL Software engineers with clients' teams and on clients' premises, if needed;
- Execution of ISA-related activities, allowing clients' engineers to concentrate on creating value and focus on core development activities;
- CMMI level 5 mature processes: CRITICAL Software operates to stringent requirements, using Key Performance Indicators;
- Optimisation for efficient execution and effective delivery;
- Risk-sharing: clients' success is CRITICAL Software's success;
- Experienced RAMS engineers reduce the risks associated with high integrity applications.



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We are CMMI® Maturity Level 5 rated.
For a list of our certifications & standards visit our website.

