



SIEMENS

Ingenuity for life

Global safety transformation services

Accelerate time-to-market with product safety design and compliance services

Benefits

- Transform processes and product safety management to comply with international standards
- Prepare your engineers for future challenges through knowledge transfer of safety standards, requirement skills and analysis methods
- Increase your confidence with services in system loss analysis, HARA and threat analysis
- Get to market faster using autonomous architecture or advanced driver assistance systems (ADAS) co-development services
- Advance your product technical ability using Siemens services in artificial intelligence (AI) and cybersecurity
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Summary

Today manufacturers are challenged to design and build their products with higher safety standards for competing in the global market place. Their products are required to conform to many different international safety standards and regulations.

With the fast-growing autonomous market, companies are eager to improve their safety knowledge and technology skills continuously. These need to support their new vehicle development in order to be competitive and industry-compliant.

Rapid technology advancement and changes in safety regulations require adjustments to organizational processes and streamlining the flow of design and test data.

How would you change your systems to deliver? Would you like to address change through a complete transformation program, or prefer to address individual safety challenge by discrete project? Have you identified a feasible solution path for future success?

Siemens Digital Industries Software's experience and deep knowledge of safety standards and solutions cover multiple implementation areas: safety lifecycle process, safety analysis, system loss analysis, safety concepts, hazard analysis and risk assessment (HARA), qualitative and quantitative, and design for assembly (DFA).

Siemens can perform a gap analysis to compare industry best-in-class, recommend areas for improvement and derive a tailored roadmap towards a future state that is both value-based and realistic.

With a co-development engagement model, we can support your autonomous vehicle or ADAS needs in system, hardware, software, cybersecurity and artificial intelligence, from architecture to validation.

The following services can be delivered individually or as a packaged set of service offerings.

- ISO 26262 gap analysis and process transformation
- ISO 26262 knowledge transfer
- Safety analysis seminars
- Architectural co-development
- AI workshops and cybersecurity services

Global safety transportation services

ISO 26262 gap analysis and process transformation

Siemens begins with a maturity assessment which analyzes your organization for ISO 26262 compliance.

The ISO 26262 process transformation provides a detailed evaluation of your organization, people and technology, focusing on streamlining of processes, data flow and work activities. Upon completion, we will review the recommended safety transformation with Siemens key experts who can then help you plan the required improvements and projects.

Safe organizations align to international standards and regulations

Global safety transformation begins with knowledge transfer to your organization from senior management through engineers. The sessions will be tailored to your organization to cover required compliance topics and best-in-class engineering techniques.

Siemens' specialized offerings address needs at different project levels. The sessions cover safety requirements writing techniques, different levels of understanding in ISO 26262, developing hazards with loss analysis, safety concepts, safety of the intended functionality (SOTIF), system hazard analysis and risk assessment. We teach you how to derive the functional safety metrics with training in qualitative and quantitative analysis, along with dependent failure analysis. Siemens safety offerings deliver comprehensive skills that will make any organization ready for compliance.

Start with a safe project

Siemens Digital Industries Software global safety transformation is designed to help you start an actual project and gain confidence using a co-development model. A mutually agreed project will be identified to help your existing or new product get to market faster. This also helps you to quickly gain knowledge in the safety development process.

Siemens supports all levels of autonomous vehicle and ADAS development from vehicle, to system, to hardware and software, to cybersecurity and artificial intelligence. Together we will define deliverables per phase with clear success factors and entry/exit criteria. If necessary, we can include knowledge transfer for key experts so that they acquire the skillsets needed to support future projects.

Prerequisites

- Senior management and key expert participation
- Sharing of customer's primary processes and areas of challenge
- Commitment to ISO 26262 transformation, streamlining, and the need for action

Duration

Typical safety task duration for each activity will depend on efforts and subject scope. The following are directional:

Safety seminars in ISO 26262:

- Four days with optional day for examination

Process gap analysis and benchmark:

- Approximately six to eight weeks

Process transformation or co-development:

- A few weeks off-site for study and analysis followed by a review of the plan face-to-face at customer location

Safe project co-development:

- A few weeks to several months, depending on the scope of the selected safety project

Deliverables

Onsite presentation of the deliverables typically includes:

- Executive presentation highlighting details of value, cost and timelines
- As-is state of your organizational environment supporting safe practices and processes
- Formal training material for all safety training modules

Proposal for safety project with specific measurable results on product performance and efforts

For more information please contact SAFETY.plm@siemens.com or the services manager in your country.

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