



# Safety Management

DNV IT Global Services - Centres of Excellence

Safety is no accident! In today's regulatory environments, designing a safe system is not enough. It is necessary to be able to prove beyond reasonable doubt, that safety has been considered and designed in; from project inception, and that all risks to Life, Property and the Environment have been considered with suitable measures to mitigate those risks put in place. A reasoned argument as to how the design and mitigation strategies reduce those risks to an acceptable level is a necessary part of any qualification or certification activity.

The challenge for today's business is to strike a balance between designing and making competitive, cost effective systems, taking into consideration the need to fulfil these regulatory requirements. International guidance on safety is constantly evolving, and keeping up-to-date can be a significant activity in itself. For organisations to keep suitable specialists in house is an expensive proposition.

## **Safety Management**

ITRM offers a portfolio of professional safety management services that can be tailored to meet your specific project needs. Whether it is early hazard identification to help guide the system design process, or a complete system safety case activity involving the regulator, we provide a focused service concentrating on delivering the evidence required to show your system is safe. Our consultants have extensive experience across many domains where assurance that a system will

work as advertised is required. This includes systems where information correctness is paramount, to Land, Sea and Air systems where functional correctness and personnel safety is paramount. Our experience enables you to concentrate on making the right product, whilst we concentrate on helping you make the product right!

## Our Services

- **Safety Management:** Safety needs to be integrated early in the design process to ensure that the benefits are realised. A Safety Management Plan is an essential part of all safety activities and is required to show how safety is being addressed. Key deliverable – A Safety Management Plan showing how safety is to be addressed, and who has responsibility for safety activities. We provide focussed expert support to address your safety needs so they are planned and tailored to your regulatory environment, creating a ‘no surprises’ culture.
- **Hazard Identification:** This can be performed in isolation or as part of the safety case service. A number of techniques are used depending on your needs, system and operating environment. Key deliverable – a document identifying all hazards associated with your system. This can be expanded to include the criticality of those hazards, as well as mitigation strategies to influence the early design.
- **Safety Case production:** A safety Case is your reasoned argument as to why the system is safe for its intended use. It draws on many activities from the safety management culture, the systems analysis, its intended use and operating environment, to show you have taken reasonable steps to meet your safety commitment. It is important that the regulator is included in the journey of the production of the case, and agrees the arguments as they are put forward. Key deliverable – An agreed safety case for your system that identifies the hazards and mitigations put in place for its intended operation.
- **Independent Safety Case evaluation:** Some equipments are developed by partners and come with a safety case. In these circumstances, it is important that the evidence provided with the equipment stands up to scrutiny and shows its operation to be safe in its intended role. This activity aids integration, ensuring at an early stage that the overall system safety objectives of your system can be met. Key deliverable – A report independently reviewing the safety case provided, highlighting any shortcomings, with recommendations for activities to address those shortcomings.
- **Independent Safety Audit:** Safety is a trust issue, and in a regulatory environment it is essential to ensure that safety has not only been implemented, but that it has been seen to be implemented. An Independent Safety Auditor is an experienced safety practitioner who maintains and inde-

pendence from the safety and design teams. They provide that essential level of trust that shows that a safety culture runs through the complete development cycles of your product. Key deliverable – Ongoing involvement in the design process, culminating in an audit report highlighting where things are going right, and where further attention needs to be concentrated.

## Your Benefits

- A scalable process that allows you to concentrate on your main goal, a successful safe product.
- Gives you confidence that the design, development and operation of your system has the safe control of hazards as the foundation of all your subsequent activities.
- Thorough and rigorous processes to allow early identification of those hazards that are inherent in your system.
- Experts that speak the language of your regulator, taking them with you on the design journey – no surprises.
- Business process improvement by the integration of assurance processes into the design activity.
- Improved efficiency – early identification means less rework later in the cycle.
- Compliance with the standard.
- Confidence that suppliers equipment will work safely when integrated and operating in your system.

## Your Contacts

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