

Enhancing your business using the CASS Scheme

Demonstrating conformity to IEC 61508 can be a daunting task, but by using a transparent and commercial approach to the certification process, suppliers of safety-related products and systems can gain some significant benefits in the market place.

Sira's Functional Safety Manager, Paul Reeve, looks at the benefits of using the CASS Scheme methodology as a way to demonstrate conformity and gain a competitive advantage.

Industry and regulators from around the world have developed IEC 61508, a generic standard with application in any industry where safety systems are used.

In contracts and tendering situations, certification to IEC 61508 is often a pre-requisite, or can offer a significant advantage over the competition.

Responsibilities of IEC 61508

<p>IEC 61508 applies to all parties in the safety-related systems supply and use chain</p>
<p>If you are a <u>supplier</u> of safety-related products or systems, you need to specify the failure modes, rates, proof test intervals, SIL-capability, etc., and have an independent functional safety assessment carried out of the product or system. And because your processes contribute to the overall safety of the system, they need to be aligned to the relevant phases of the IEC 61508-safety lifecycle.</p>
<p>If you are a <u>plant operator</u> and use, or intend to use, safety-related systems, you must establish the hazards and risks involved, specify any safety functions and their Safety Integrity Levels (SILs), and have these verified by a functional safety assessment. In contracts involving such systems, making approval to IEC 61508 a pre-requisite of your suppliers will greatly ease your burden of having to produce evidence of the safety of the final system. Where necessary, your procedures should also be aligned to the relevant phases of the IEC 61508 safety life-cycle.</p>
<p>An essential requirement of IEC 61508 is a "functional safety assessment", which third party certification fulfils.</p>

Sira uses the CASS (Conformity Assessment of Safety-related Systems) methodology for assessment and certification to IEC 61508, which has been specifically designed to give the following benefits:

- Reduce costs
- Enhance reputation
- Increase competitiveness
- Demonstrate regulatory compliance
- Procure with confidence
- Reduce time to market
- Enhance market opportunities

The CASS Scheme provides a rigorous and internationally acceptable structure under which consistent certification of safety related systems can take place. The scheme is operated through independent third-party certification bodies that are accredited to the European and International accreditation standards.



Going down the CASS route

If you are involved in safety systems - determining SILs, specifying, developing, manufacturing, integrating, installing, operating or maintaining, or you provide consultancy services - your business can be enhanced and extended by CASS accredited certification.

Using the CASS methodology, Sira has developed a range of certification services to allow suppliers and users of safety-related products and systems to get the full benefits out of the Scheme.

These services can include structured training or informal consultancy 'clinics' as required for

safety-related hardware or software designs, with guidance on the interpretation of IEC 61508 or related standards.

A 'gap-analysis' is also advantageous and is recommended, as it gives an indication of how close to conformity you are, and will help to devise an 'action-plan' of how to achieve conformity and the competitive advantages that this brings.

Together with the above, Sira offers two types of accredited certification:

- **Approved product certificates**, applicable to safety products or sub-systems. This certificate verifies all the necessary data required by IEC 61508 to support the use of the product within safety applications.
- **Approved company certificates**, applicable to organisations involved at any phase(s) of the safety system lifecycle. This certificate verifies that the organisation's management of functional safety meets the requirements of IEC 61508 (Part 1, clause 6).

How Can Sira Help?



Sira was the first certification body in the world to be accredited for functional safety certification to IEC 61508.

For more information please contact us:

Tel + 44 (0) 1244 670 900

Email: functionalsafety@siracertification.com

Web: www.siracertification.com

Sira is a member of *The 61508 Association*, the UK cross-industry users group for IEC 61508: www.61508.org



More information about the CASS scheme is available from www.cass.uk.net



SIRA CASS certification brings benefits to Hima-Sella

Hima-Sella's Marketing Manger, Janet Smith, looks back at how CASS certification has brought many benefits to Hima-Sella's safety systems business.

In 2001 Hima-Sella became the first company to be awarded the CASS certificate for functional safety management, in compliance with the international safety standard IEC 61508. Awarded by the accredited certifying body Sira, it confirmed that Hima-Sella was fully committed to demonstrating best practice as put forward in the new standard, underpinned by the principles of integrity, transparency and consistency, embodied in the CASS certification process.

Hima-Sella has been recognised as specialist systems integrators for over 30 years and during that time, has supplied countless safety-related systems to industries such as oil & gas, petrochemical, nuclear, steel and chemical. The introduction of IEC 61508, and acceptance of the standard as best practice, has enabled Hima-Sella to deliver more cost-effective safety system solutions.

An example of this relates to Hima-Sella's provision of a Protective Instrument System designed and built to SIL 2 for installation on the new process plant at Esso, Fawley. This independent, freestanding, safety-related system contained 4 separate emergency shutdown systems to oversee safe operation of the Feed Pumps, Recycle Gas Compressor, Furnace and Emergency Depressurising System.

When being considered as a supplier, Hima-Sella's CASS certification provided extra confirmation to the customer that they had the capability and processes in place, as well as their proven experience, to provide a system of such complexity as the one described.

CASS certification provides reassurance to the customer that the functional safety aspect of a

safety-related system has been properly addressed. In achieving Functional Safety Management Capability to the CASS Scheme, Hima-Sella has established sound practices to demonstrate that any system supplied complies with the requirements of IEC 61508. The CASS Certificate awarded by Sira has brought many important benefits to Hima-Sella, such as improved internal processes and procedures, and clearer specification of safety requirements giving confidence that the safety system complies with the standard.

Implementation of IEC 61508 has enabled Hima-Sella to offer more cost-effective safety systems to clients, a factor which has contributed to Hima-Sella's success in securing new business, particularly with regard to requirements for SIL-rated systems.

The Sira Certification to CASS confirms that Hima-Sella is capable of providing customers with a safety system that has been realised within a simple, reliable and compliant safety management system.

Hima-Sella

Tel: +44 (0) 161 429 4500

Email: sales@hima-sella.co.uk

Web: www.hima-sella.co.uk



Web: www.siracertification.com
Tel: +44 (0) 1244 670 900
Email: info@siracertification.com