

Service
Definition Document

System Safety Cyber Risk Assessments

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About Safeguard Engineering

Safeguard Engineering Limited is an independent, employee-owned engineering consultancy delivering impartial safety, environmental and engineering expertise across Defence, Maritime, Land, Aviation, and Commercial sectors. We integrate best practices and foster innovation, building enduring collaborative relationships with our customers and enabling them to reduce risks, increase sustainability and make informed decisions.

Service summary

We support you in understanding Cyber-Safety requirements, develop inclusive security management systems, and integrate cyber into safety cases. Our expertise delivers assessments, compliance gap analyses, and actionable plans. With deep knowledge across defence, we provide independent advice, clear roadmaps, and effective communication of cyber risks to enhance system capability.

Service features

- Support in understanding Cyber-Safety requirements.
- Development of Cyber inclusive Security Management System and Plan.
- Experienced and in-depth understanding of Cyber Security requirements.
- Support the inclusion of Cyber within developed Safety Cases.
- Provide compliance gap-analysis assessments and reports.
- Conduct robust Cyber Risk and Cyber-Safety Assessments.
- Produce Cyber Risk Registers for effective communication of risks.
- Integrated safety, cybersecurity, and data assurance assessments.
- Support with JSP 892, JSP 440, and DefStan 05-138.
- Understanding of the unique cyber requirements for the defence sector.

Service benefits

- Building confidence in Cyber Security within Safety.
- Providing clear roadmaps and actionable plans to address identified gaps.
- Delivering a clear understanding of requirements to assure system safety.
- Providing fully independent, open, and constructive advice and support.
- Communicating cyber security risks effectively to end users.
- Supporting the creation of relevant, maintainable, and easy-to-read safety documentation.

- Applies lessons learned across defence programmes to support regulatory compliance.
- Improved understanding and visibility of Cyber Risks.
- Seamless integration of Cyber with Safety Processes.
- Ensuring long-term resilience and continuous improvement.

Value proposition

Safeguard Engineering provides independent assurance that Safety-critical systems remain Cyber secure, resilient, and compliant in an increasingly connected world. Our approach integrates Cyber considerations into established Safety frameworks, combining regulatory standards with advanced security practices to bridge the gap between traditional Safety engineering and modern Cyber resilience. We deliver confidence to organisations, regulators, and end users through transparent, evidence-based assurance that demonstrates control of Cyber Risks.

Detailed service definition

We provide comprehensive support for integrating Cyber considerations into safety-critical systems. Our services begin with helping organisations identify, understand, and formalise Cyber-Safety requirements in line with regulatory and industry standards, including Secure by Design (SbD), JSP892, JSP 440, and DefStan 05-138. This ensures a strong foundation for system assurance and compliance. Our team specialises in designing and implementing cyber-inclusive Security Management Systems and Plans. These frameworks embed cyber resilience within existing safety processes, enabling organisations to manage risks effectively and maintain operational integrity.

Our team brings together experienced cyber professionals, engineers and former Defence professionals with expertise spanning safety engineering, marine and aviation systems, explosives, nuclear, digital technologies, artificial intelligence, and autonomy. With extensive experience and deep knowledge of Cyber Security principles, we offer independent, constructive advice across multiple sectors. This expertise allows us to deliver tailored solutions that address complex challenges and support informed decision-making. We conduct thorough Cyber-Safety assessments and compliance gap analyses, providing detailed reports and actionable recommendations. These assessments help organisations identify vulnerabilities and implement corrective measures to achieve full compliance and assurance. In addition, we support the integration of Cyber considerations within developed Safety Cases, ensuring a holistic approach to System Safety. By bridging the gap between Cyber Security and traditional Safety practices, we enable seamless assurance across all system components.

We focus on effective communication of Cyber Risks to stakeholders and end users. Our approach simplifies complex technical requirements, making them clear and

understandable. By working collaboratively with your teams, we enhance organisational capability and confidence in managing Cyber-Safety challenges.

Why Safeguard Engineering?

Safeguard Engineering Limited is an independent safety and environmental engineering consultancy providing specialist engineering advice and cloud consultancy services across Defence, Maritime, Land, Aviation, and Commercial sectors. We are completely impartial, cost effective and always operate with integrity and trust.

We employ a dedicated team of over 60 consultants consisting of highly experienced data scientists, engineers, environmentalists and ex-defence personnel from diverse disciplines, including safety engineering, marine engineering, aviation safety, weapons and explosives safety, nuclear power systems, digital systems, Air Traffic Management, Artificial Intelligence, Autonomy, and environmental sciences.

The vast majority of our staff are security cleared to at least SC, with a number holding DV clearance. Our processes enable us to handle sensitive and classified information, and to separate teams as necessary to ensure compliance with security and any potential conflict of interest requirements. Our IT systems are certified to Cyber Essentials Plus.

Our capability

Our capabilities span the full project lifecycle, from early-stage concept and feasibility studies through to design, assessment, operation, and eventual decommissioning and disposal. We deliver systems safety and environmental management, including specialism in assurance of autonomous systems and other systems with complex digital requirements. We also provide expertise in a wide range of related services, including cyber risk assessment, data cleansing and migration, data governance and AI assurance, and independent safety audits. Our consultants possess deep knowledge of relevant standards, regulations, and best practices, ensuring that our clients achieve compliance while not compromising on innovation and operational effectiveness. We are independent of any solution or hardware provider, ensuring that our advice is always impartial.

In addition to our core staff, we are able to reach back into our network of trusted associates and specialist partners, ensuring that we can scale our services and bring in additional niche expertise as required to meet any client challenge

Our experience

Safeguard's expertise includes supporting complex Defence acquisition, upgrade and in-service projects for land, sea, and air platforms. We have a proven track record in delivering support for military vehicles, ships, submarines, aircraft, weapon systems, unmanned systems, and a range of Defence facilities. Our consultants are adept at navigating MOD and international defence standards, supporting equipment

certification, and working closely with both government and industry stakeholders. We provide specialist assurance support for digital and software-intensive systems, addressing emerging risks associated with automation, autonomy, cyber security, and system integration.

Our delivery

It is of utmost importance to us that we always keep our commitments and ensure that customer expectations are met - and wherever possible, exceeded. Every project has an assigned project manager who takes responsibility for delivery, supported by senior members of our team who ensure that quality processes are being followed and that the delivery approach is appropriate. Our blend of expertise and experience enables us to bring a practicable but forward-thinking approach to all of our work, underpinned by highly motivated team. Our quality management system is certified to ISO 9001. Our high rates of repeat work and continued strong rate of growth as a business stand testament to the quality of our output.



Safeguard Engineering

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