

ICS	Key Area		Perimeter			Best practice standard reference	Date of current issue / edition	Title (english)	Title (original language)	Scope / Presentation of each standard	Standardisation Organisation / Body footnote 2)	Standard available in English yes / no footnote 3)	Source where to obtain the standard footnote 4)	COMMENTS		Category footnote (8)	Key words
	EG n°	Key area designation	Key area Perimeter (footnote 1)	Sub-domain Perimeter 1	Sub-domain Perimeter 2									Strength of the Std. (A : to be applied; G: Guide ; F: expected future evolution; (see footnotes 5,6,7)	Free comments		
17	Dependability & Safety	Engineering	Design & Assessment	Safety	AER-P6 Basic Edition	Mar-09	Instructions for the Definition of Technical Requirements for Military Aircraft	Istruzioni per la compilazione dei capitolati tecnici per aeromobili militari	It contains the instructions to be followed when drawing up Technical Specifications for military aircraft. It lists the minimum safety requirements to be addressed within an aeronautical contract, to define and describe the methodology to calculate the safety High Level Objectives taking into account the "Through Life" approach.	IT MOD	Yes		A		MS	Functional Safety Air Vehicles	
17	Dependability & Safety	Vocabulary			AOP 38 Edition 5	Oct-09	Glossary of terms and definitions concerning the safety and suitability for service of munitions, explosives and related products		Specialist acronyms, terms and definitions related to Munitions and explosives.	NATO	Yes	<a href="http://www.nato.int">www.nato.int</a>	G		HS	Munitions Explosives Safety Definitions Vocabulary	
17	Dependability & Safety	Management	Safety	Munitions	AOP 42 Edition 1	Mar-09	Integrated design analysis for munition initiation systems and other safety critical systems		This document explains how to improve safety analysis quality and compliance analysis to safety design standard (e.g. STANAG 4187) for safety critical item (e.g. ammunition fuze).	NATO	Yes	<a href="http://www.nato.int">www.nato.int</a>	G		HS	Functional Safety Munitions Management	
17	Dependability & Safety	Management	Safety	Munitions	AOP 52 Edition 1	Nov-08	Guidance on Software Safety Design and Assessment of Munitions-Related Computing Systems		to provide management and engineering guidelines to achieve a reasonable level of assurance that the software and software-like devices will execute within the system context and operational environment with an acceptable level of safety risk.	NATO	Yes	<a href="http://www.nato.int">www.nato.int</a>	G		HS	Functional Safety Munitions Management	
17	Dependability & Safety	Management	Dependability		ARMP-1 Edition 4	Sep-08	NATO requirements for Reliability & Maintainability		Specifies the need and methodology for implementing a reliability and maintainability programme	NATO	Yes	<a href="http://www.nato.int/docu/stanag/armp1">www.nato.int/docu/stanag/armp1</a>	A		MS	Reliability Maintainability Management	
17	Dependability & Safety	Requirement	Dependability		ARMP-4 Edition 3	Jun-03	Guidance for Writing NATO R&M Requirements Documents		It provides guidance on writing R&M requirement documents during the life cycle of a project.	NATO	Yes	<a href="http://www.nato.int/docu/stanag/armp4/armp4-e.htm">http://www.nato.int/docu/stanag/armp4/armp4-e.htm</a>	G		MS	Dependability Requirements	
17	Dependability & Safety	Test & Verification	Reliability & Safety In service		ARMP-6 Edition 3	Aug-08	Guidance for Managing In Service R&M		This guide is dealing with contractual arrangements for assuring R&M performance, in-service R&M plan, assessing in-service R&M performance, identifying and prioritising opportunities for in-service R&M improvement, broader exploitation of in-service R&M data and limitations of cots equipment on monitoring and managing in-service R&M.	NATO	Yes	<a href="http://www.nato.int/docu/stanag/armp6/armp-6_ed3-e.pdf">http://www.nato.int/docu/stanag/armp6/armp-6_ed3-e.pdf</a>	G		MS	In Service Reliability Maintainability	
17	Dependability & Safety	Vocabulary			ARMP-7 Edition 2	Aug-08	NATO Reliability and maintainability terminology applicable to ARMPs		Specific definitions referred to in the NATO Allied R&M publications	NATO	Yes	<a href="http://www.nato.int/docu/stanag/armp7">www.nato.int/docu/stanag/armp7</a>	G		HS	Reliability Maintainability Availability Vocabulary	
17	Dependability & Safety	Software			ARMP-9 Edition 1	Jul-09	Guide to the management of software R&M		This ARMP provides an oversight of the issues / methodologies / tests / tasks that can be used when a defence product includes a software element. It recognises that software should be managed as an integral part of the whole system but acknowledges the fact that software is different, that it does not fail in the same way as hardware and requires different techniques to ensure that it is reliable	NATO	Yes	<a href="http://www.nato.int/docu/stanag/armp9/armp-9_ed1-e.pdf">http://www.nato.int/docu/stanag/armp9/armp-9_ed1-e.pdf</a>	G		TS	Software Reliability	
17	Dependability & Safety	Engineering	Techniques & Methods	General	ARP 4761	Dec-96	Guidelines and Methods for Conducting the Safety Assessment Process on Civil Airborne Systems and Equipment		This standard from the Society of Automotive Engineers (SAE) is a common international basis for demonstrating compliance with airworthiness requirements as it is largely referenced in ARP4754 : for various safety assessments detailed guidelines and methods. Each safety activity is detailed and examples provided.	SAE	Yes	<a href="http://standards.sae.org/arp4761">http://standards.sae.org/arp4761</a>	G		MS	Safety Methodology	
17	Dependability & Safety	Test & Verification	Data Collection & Failure Analysis		ATA SPEC 2000		Reliability Data Collection/Exchange		It standardizes record formats for collecting and exchanging aircraft reliability data. This document is for aircraft only but the mind of this document would be adapted for other systems	ATA Aviation	Yes	<a href="http://www.spec2000.com/">http://www.spec2000.com/</a>	G		TS	Data Collection FRACAS	
17	Dependability & Safety	Software			BS 5760 part 8	Oct-98	Guide to the Assessment of Reliability of Systems containing Software		This document deals with the reliability assessment part of the software development process. It describes management techniques, statistical methods of analysis, mathematical models linked to a methodology to follow in order to assess the reliability of systems containing software	BSI	Yes	<a href="http://shop.bsigroup.com/ProductDetail/?pid=00000000001504792">http://shop.bsigroup.com/ProductDetail/?pid=00000000001504792</a>	G		TS	Software Reliability	

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	EG n°	Key area designation	Key area Perimeter (footnote 1)	Sub-domain Perimeter 1	Sub-domain Perimeter 2									Strength of the Std. (A : to be applied; G: Guide ; F: expected future evolution; (see footnotes 5,6,7)	Free comments		
	17	Dependability & Safety	Management	Dependability		BS5760 part 18	May-10	Reliability of systems, equipment and components. Guide to the demonstration of dependability requirements. The dependability case		This document provides an overview of the assurance case approach to design and delivery of dependable systems. It provides guidance on how to implement and manage a programme of activities through the life of the system / equipment.	BSI	Yes	<a href="http://shop.bsigroup.com/en/ProductDetail/?pid=000000000030163767">http://shop.bsigroup.com/en/ProductDetail/?pid=000000000030163767</a>	A		MS	Dependability Management
	17	Dependability & Safety	Management	Dependability		Def Stan 00-40 part 1 issue 6	Jun-08	Reliability and Maintainability: Management responsibilities and requirements for programmes and plans		It is a general introduction to the means of achieving reliable and maintainable equipment detailing the specific measures to be adopted by the MOD Sponsors, the Project Managers and the Contractors.	UK Dstan	Yes	<a href="http://www.dstan.mod.uk">www.dstan.mod.uk</a>	A		MS	Reliability Maintainability Management Assurance Case
	17	Dependability & Safety	Management	Dependability		Def Stan 00-42 part 3 issue 3	Mar-08	Reliability and Maintainability Assurance Activities – Reliability and Maintainability Case		It provides a description of the principles of progressive assurance in R&M, and provides guidance on the content and the ownership of the R&M Case through the life of a system.	UK Dstan	Yes	<a href="http://www.dstan.mod.uk">www.dstan.mod.uk</a>	G		MS	Reliability Maintainability Management Assurance Case
	17	Dependability & Safety	Test & Verification	Data Collection & Failure Analysis		Def Stan 00-44 Issue 1	Jan-07	Reliability and Maintainability Data Collection and Classification		The document is an effective guide to the processes that should be adopted for Data Collection, Incident Sentencing, Data Classification for air, land and sea products	UK MOD	Yes	<a href="http://www.dstan.mod.uk/standards/defstans/00/04/0000100.pdf">http://www.dstan.mod.uk/standards/defstans/00/04/0000100.pdf</a>	G		TS	Data Collection
	17	Dependability & Safety	Management	Safety	General	Def Stan 00-56 part 1 issue 4	Jun-07	Safety Management Requirements for Defence Systems		This Standard specifies the safety management requirements for defence systems.	UK Dstan	Yes	<a href="http://www.dstan.mod.uk">www.dstan.mod.uk</a>	A		MS	Safety Management
	17	Dependability & Safety	Engineering	Design & Assessment	Maintainability	DOD Hdbk 791	Mar-88	MILITARY HANDBOOK: MAINTAINABILITY DESIGN TECHNIQUES		It provides guidelines to assist designers in incorporating maintainability into Army materiel early in research and development. It also illustrates the design principles that result in maximum maintainability.	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	G		TS	Maintainability Design
	17	Dependability & Safety	Software			ED 12 Amendment 1	Oct-99	Software considerations in airborne systems and equipment certification		This certification standard aims at ensuring a degree of rigor in the software practices, and ultimately assuring the safety of airline passengers, by following a disciplined and documented process. ED12 describes three key processes: planning, correctness and development.	EUROCAE	Yes	<a href="http://boutique.eurocae.net/catalog/index.php?cPath=24&amp;osCsid=bd7b140ee25042a18ab46c84f52143e5">http://boutique.eurocae.net/catalog/index.php?cPath=24&amp;osCsid=bd7b140ee25042a18ab46c84f52143e5</a>	G		TS	Software Reliability
	17	Dependability & Safety	Management	Safety	Aircraft	ED 79	Apr-97	Certification considerations for highly-integrated or complex aircraft systems		Development assurance establishes confidence that system development has been accomplished in a sufficiently disciplined manner to limit the likelihood of development errors that could impact aircraft safety	EUROCAE	Yes	<a href="http://boutique.eurocae.net/catalog/index.php?cPath=24&amp;osCsid=bd7b140ee25042a18ab46c84f52143e5">http://boutique.eurocae.net/catalog/index.php?cPath=24&amp;osCsid=bd7b140ee25042a18ab46c84f52143e5</a>	G		MS	Functional Safety Air Vehicles Management
	17	Dependability & Safety	Electronic			ED 80	Apr-00	Design assurance guidance for airborne electronic hardware		It is intended to be used by aircraft manufacturers and suppliers of electronic hardware items for safety and certification concerns. It has been prepared to assist organizations by providing design assurance guidance for the development of airborne electronic hardware such that it safely performs its intended function, in its specified environments	EUROCAE	Yes	<a href="http://boutique.eurocae.net/catalog/index.php?cPath=24&amp;osCsid=bd7b140ee25042a18ab46c84f52143e5">http://boutique.eurocae.net/catalog/index.php?cPath=24&amp;osCsid=bd7b140ee25042a18ab46c84f52143e5</a>	G		TS	Software Reliability
	17	Dependability & Safety	Vocabulary			IEC 60050-191 Edition 1 amendment 2	Jan-02	International Electrotechnical Vocabulary - Part 191: dependability		Definitions applicable to the dependability discipline	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		HS	Dependability Definitions Vocabulary
	17	Dependability & Safety	Management	Dependability		IEC 60300-1Edition 2	Jun-03	Dependability management – Part 1: Dependability Management Systems		Specifies the need and methodology for implementing a dependability programme	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	A		MS	Dependability Management
	17	Dependability & Safety	Management	Dependability		IEC 60300-2 Edition 2	Mar-04	Dependability management - Part 2: Guidelines for dependability management		Provides guidelines for dependability management of product design, development, evaluation and process enhancements. Life cycle models are used to describe product development or project phases	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		MS	Dependability Management
	17	Dependability & Safety	Engineering	Design & Assessment	Maintainability	IEC 60300-3-10 Edition 1	Jan-01	Dependability management - Part 3-10: Application guide - Maintainability		It provides guidance on how the maintenance aspects of the tasks should be considered in order to achieve optimum maintainability and can be used to implement a maintainability programme covering the initiation, development and in-service phases of a product	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Maintainability Management

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	17	Dependability & Safety	Test & Verification	Data Collection & Failure Analysis		IEC 60300-3-2 Edition 2	Nov-04	Dependability management - Part 3-2: Application guide - Collection of dependability data from the field		provides guidelines for the collection of data relating to reliability, maintainability, availability and maintenance support performance of items operating in the field. It deals in general terms with the practical aspects of data collection and presentation and briefly explores the related topics of data analysis and presentation of results.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Reliability Data Collection
	17	Dependability & Safety	Requirement	Dependability		IEC 60300-3-4 edition 2	Sep-07	Dependability management - Part 3-4: Application guide - Guide to the specification of dependability requirements		It provides guidelines to define dependability requirements, advices for the customer to ensure that the requirements are met and advices for the purchaser to satisfy the requirements.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		MS	Dependability Requirements
	17	Dependability & Safety	Test & Verification	Test Method		IEC 60300-3-5 Edition 1	Mar-01	Dependability management - Reliability test conditions and statistical test principles		This part of IEC 60300-3 provides guidelines for the planning and performing of reliability tests and the use of statistical methods to analyse test data. It describes the tests related to repaired and non-repaired items together with tests for constant and non-constant failure intensity and constant and non-constant failure rate	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Reliability Testing
	17	Dependability & Safety	Engineering	Design & Assessment	Reliability	IEC 60319 Edition 3	Sep-99	Presentation and specification of reliability data for electronic components		It provides guidance for the collection and presentation of data relating to the reliability of electronic components and their reliability characteristics. It also provides guidance to users as to how they should specify their reliability requirements to manufactures	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Reliability Data Collection
	17	Dependability & Safety	Engineering	Design & Assessment	Maintainability	IEC 60706-2 Edition 2	Mar-06	Maintainability of equipment - Part 2: Maintainability requirements and studies during the design and development phase		It contains information relating to the setting of and designing for maintainability requirements, activities that can be undertaken to provide confidence that the requirements can be met	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Maintainability Prediction
	17	Dependability & Safety	Engineering	Design & Assessment	Testability	IEC 60706-5 Edition 2	Sep-07	Maintainability of equipment - Part 5: Testability and diagnostic testing		provide guidance for the early consideration of testability aspects in design and development, and to assist in determining effective test procedures as an integral part of operation and maintenance.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Testability
	17	Dependability & Safety	Engineering	Techniques & Methods	Failure Mode, Effects and Criticality Analysis	IEC 60812 Ed 2	Jan-06	Analysis techniques for system reliability - Procedure for failure mode and effects analysis (FMEA)		This International Standard describes Failure Mode and Effects Analysis (FMEA) and Failure Mode, Effects and Criticality Analysis (FMECA), and gives guidance as to how they may be applied to achieve various objectives by providing the procedural steps necessary to perform an analysis; identifying appropriate terms, assumptions, criticality measures, failure modes; defining basic principles; providing examples of the necessary worksheets or other tabular forms.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	FMEA FMECA
	17	Dependability & Safety	Test & Verification	Reliability Growth		IEC 61014 edition 2	Jul-03	Programmes for reliability growth		Specifies requirements and gives guidelines for the exposure and removal of weaknesses in hardware and software items for the purpose of reliability growth. Applies when the product specification calls for a reliability growth programme of equipment (electronic, electromechanical and mechanical hardware as well as software) or when it is known that the design is unlikely to meet the requirements without improvement.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	reliability growth
	17	Dependability & Safety	Engineering	Techniques & Methods	Fault Tree Analysis	IEC 61025 Edition 2	Dec-06	Fault tree analysis (FTA)		This International Standard describes fault tree analysis and provides guidance on its application	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Fault Tree FTA
	17	Dependability & Safety	Engineering	Techniques & Methods	Reliability Block Diagrams	IEC 61078 edition 2	Jan-06	Analysis techniques for dependability - Reliability block diagram and boolean methods		describes procedures for modelling the dependability of a system and for using the model in order to calculate reliability and availability measures. The RBD modelling technique is intended to be applied primarily to systems without repair and where the order in which failures occur does not matter.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	RBD Reliability Block Diagrams

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	EG n°	Key area designation	Key area Perimeter (footnote 1)	Sub-domain Perimeter 1	Sub-domain Perimeter 2									Strength of the Std. (A : to be applied; G: Guide ; F: expected future evolution; (see footnotes 5,6,7)	Free comments		
	17	Dependability & Safety	Test & Verification	Test Method		IEC 61163-1Edition 2	Jun-06	Reliability stress screening - Part 1: Repairable assemblies manufactured in lots		describes particular methods to apply and optimize reliability stress screening processes for lots of repairable hardware assemblies, in cases where the assemblies have an unacceptably low reliability in the early failure period, and when other methods, such as reliability growth programmes and quality control techniques, are not applicable.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Reliability Testing
	17	Dependability & Safety	Test & Verification	Reliability Growth		IEC 61164 edition 2	Mar-04	Reliability growth - Statistical test and estimation methods		Gives models and numerical methods for reliability growth assessments based on failure data, which were generated in a reliability improvement programme. These procedures deal with growth, estimation, confidence intervals for product reliability and goodness-of-fit tests.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	reliability growth
	17	Dependability & Safety	Engineering	Techniques & Methods	General	IEC 61165 Edition 2	May-06	Application of Markov techniques		provides guidance on the application of Markov techniques to model and analyze a system and estimate reliability, availability, maintainability and safety measures. This standard is applicable to all industries where systems, which exhibit state-dependent behaviour, have to be analyzed. The Markov techniques covered by this standard assume constant time-independent state transition rates. Such techniques are often called homogeneous Markov techniques.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		MS	Markov
	17	Dependability & Safety	Engineering	Design & Assessment	Safety	IEC 61508 All parts	Various	Functional safety of electrical/electronic/programmable electronic safety-related systems		It is a standard for Safety techniques and Methods for all safety lifecycle activities for systems comprised of electrical and/or electronic and/or programmable electronic components (electrical/electronic/ programmable electronic systems (E/E/PESs)). It applies to the entire E/E/PE safety-related system, providing system requirements, but also hardware (IEC 61508 part 2) and software (IEC 61508 part 3) refined requirements in a sole standard. The whole parts define the entire design and assessment process, from the system level, to the hardware or software component level, from requirements specification, to methods and measures to be used to implement and verify those requirements.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Functional Safety
	17	Dependability & Safety	Management	Safety	Electric / Electronic Function	IEC 61508-1 edition 2	Apr-10	Functional safety of electrical/electronic/programmable electronic safety-related systems		IEC 61508 defines appropriate means for achieving functional safety	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	A		MS	Safety Management
	17	Dependability & Safety	Electronic			IEC 61508-2 Edition 2	Apr-10	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 2: Requirements for electrical/electronic/profram systems		It specifies how to refine the E/E/PE system safety requirements specification and all requirements for activities that are to be applied during the design and manufacture of the E/E/PE safety-related systems	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Reliability Design
	17	Dependability & Safety	Software			IEC 61508-3 Edition 2	Apr-10	Functional safety of electrical/electronic/programmable electronic safety-related systems		This standard applies to any software forming part of a safety-related system or used to develop a safety-related system within the scope of IEC 61508-1 and IEC 61508-2. It requires that the software safety functions and software systematic capability are specified within the system analyses which identify whether functional safety is necessary to ensure adequate protection against each significant hazard	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Software Reliability
	17	Dependability & Safety	Vocabulary			IEC 61508-4 Edition 2	Apr-10	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 4: Definitions and abbreviations		Definitions terms and abbreviations used in the IEC 61508 series of documents	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		HS	Functional Safety Electrical Electronic Programmable Definitions Vocabulary

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	17	Dependability & Safety	Engineering	Techniques & Methods	General	IEC 61508-7 Edition 2	Apr-10	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 7: Overview of techniques and measures		It is a standard for Safety techniques and Methods for all safety lifecycle activities for systems comprised of electrical and/or electronic and/or programmable electronic components (electronic/electronic/ programmable electronic systems (E/E/PES)). The references should be considered as basic references to methods and tools or as examples, and may not represent the state of the art.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		MS	Safety Methodology
	17	Dependability & Safety	Test & Verification	Test Method		IEC 61650 edition 1	Aug-97	Reliability data analysis techniques - Procedures for comparison of two constant failure rates and two constant failure (event) intensities		Specifies procedures to compare two observed - failure rates; - failure intensities; - rates/intensities of relevant events. The procedures are used to determine whether an apparent difference between the two sets of observations can be considered statistically significant. Numerical methods and a graphical procedure are prescribed	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Reliability Testing
	17	Dependability & Safety	Vocabulary			IEC 61703 edition 1	Sep-01	Mathematical expressions for reliability, availability, maintainability and maintenance support terms		Provides mathematical expressions for reliability, availability, maintainability and maintenance support measures.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		HS	Matematical Reliability Availability Definitions
	17	Dependability & Safety	Engineering	Techniques & Methods	Reliability Prediction	IEC 61709 Edition 1	Oct-96	Electronic components - Reliability - Reference conditions for failure rates and stress models for conversion		This standard is aimed to organizations that have their own data and describes how to state and use that data to perform reliability predictions. It also describes how reliability data can be used to predict failure rates at equipment level.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Reliability Prediction
	17	Dependability & Safety	Communications			IEC 61907 edition 1	Dec-09	Communication network dependability engineering		guidance on dependability engineering of communication networks. The communication network includes telecommunications networks, Internet and intra-networks utilizing information technology. This standard describes the influence of dependability attributes and their impact on network performance. It provides the criteria and methodology for network technology designs, security service functions, dependability assessment and quality of service evaluation	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	Communications Reliability
	17	Dependability & Safety	Test & Verification	Reliability Growth		IEC 62429 Ed 1	Nov-07	Reliability growth - Stress testing for early failures in unique complex systems		gives guidance for reliability growth during final testing or acceptance testing of unique complex systems. It gives guidance on accelerated test conditions and criteria for stopping these tests.	IEC	Yes	<a href="http://webstore.iec.ch/">http://webstore.iec.ch/</a>	G		TS	reliability growth
	17	Dependability & Safety	Software			IEEE 1633	Jun-08	Recommended Practice on Software Reliability		This recommended practice prescribes methods for assessing and predicting the reliability of software, based on a lifecycle approach to software reliability engineering. It provides information necessary for the application of software reliability (SR) measurement to a project, lays a foundation for building consistent methods, and establishes the basic principle for collecting the data needed to assess and predict the reliability of software.	IEEE	Yes	<a href="http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=4554196">http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=4554196</a>	G		TS	Software Reliability
	17	Dependability & Safety	Engineering	Design & Assessment	Safety	ISO 26262 All parts	Various	Road Vehicles - Functional safety		ISO 26262 is the adaptation of IEC 61508 to comply with needs specific to the application sector of E/E systems within road vehicles. It covers the same range of activities.	ISO	Yes	<a href="http://www.iso.org">www.iso.org</a>	A		MS	Functional Safety Road Vehicles
	17	Dependability & Safety	Vocabulary			ISO 26262 part 1		Road vehicles -- Functional safety -- Part 1: Vocabulary		Specifies the terms, definitions and abbreviated terms used in all parts of ISO26262	ISO	Yes	<a href="http://www.iso.org">www.iso.org</a>	G		HS	Functional Safety Road Vehicles Vocabulary Definitions

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	EG n°	Key area designation	Key area Perimeter (footnote 1)	Sub-domain Perimeter 1	Sub-domain Perimeter 2									Strength of the Std. (A : to be applied; G: Guide ; F: expected future evolution; (see footnotes 5,6,7)	Free comments		
	17	Dependability & Safety	Management	Safety	vehicle	ISO 26262 part 2		Road vehicles -- Functional safety -- Part 2: Management of functional safety		This part of ISO 26262 specifies the requirements on functional safety management for automotive applications. These requirements cover the project management activities of all safety lifecycle phases and consist of project-independent requirements, project-dependent requirements to be followed during development, and requirements that apply after release for production.	ISO	Yes	<a href="http://www.iso.org">www.iso.org</a>	A		MS	Functional Safety Road Vehicles Management
	17	Dependability & Safety	Management	Safety	vehicle	ISO 26262 part 3		Road vehicles -- Functional safety -- Part 3: Concept phase		This part of the International Standard specifies the requirements on the concept phase for automotive applications. These requirements include the item definition, the initiation of the safety lifecycle, the hazard analysis and risk assessment and the functional safety concept.	ISO	Yes	<a href="http://www.iso.org">www.iso.org</a>	A		MS	Functional Safety Road Vehicles Management
	17	Dependability & Safety	Engineering	Techniques & Methods	General	ISO 26262 part 4		Road vehicles -- Functional safety -- Part 4: Product development at the system level		ISO 26262 is the adaptation of IEC 61508 to comply with needs specific to the application sector of E/E systems within road vehicles. This part "Product development: system level" specifies the requirements on product development at the system level.	ISO	Yes	<a href="http://www.iso.org">www.iso.org</a>	G		MS	Safety Methodology
	17	Dependability & Safety	Electronic			ISO 26262 part 5		Road vehicles - Functional safety		It specifies the requirements on product development at the hardware level. These include requirements on the initiation of product development at the hardware level, the specification of the hardware safety requirements, hardware design, hardware architectural metrics, and evaluation of violation of the safety goal due to random hardware failures and hardware integration and testing	ISO	Yes	<a href="http://www.iso.org">www.iso.org</a>	G		TS	Reliability Design
	17	Dependability & Safety	Software			ISO 26262 part 6		Road vehicles - Functional safety		ISO 26262 is the adaptation of IEC 61508 to comply with needs specific to the application sector of E/E systems within road vehicles. ISO 26262 part 6 covers, for software components in automotive systems, the same activities than IEC 61508 part 3	ISO	Yes	<a href="http://www.iso.org">www.iso.org</a>	G		TS	Software Reliability
	17	Dependability & Safety	Test & Verification	Reliability & Safety In service		ISO 26262 part 7		Road vehicles -- Functional safety -- Part 7: Production and operation		It specifies the requirements on functional safety management for automotive applications on production as well as operation, service and decommissioning. The most adapted standards depend on the need.	ISO	Yes	<a href="http://www.iso.org">www.iso.org</a>	A		MS	Functional Safety Road Vehicles
	17	Dependability & Safety	Test & Verification	Reliability Growth		Mil Hdbk 189A	Sep-09	DEPARTMENT OF DEFENSE HANDBOOK: RELIABILITY GROWTH MANAGEMENT		It provides procuring activities and development contractors with an understanding of the concepts and principles of reliability growth, advantages of managing reliability growth, and guidelines and procedures to be used in managing reliability growth	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	G		TS	reliability growth
	17	Dependability & Safety	Engineering	Design & Assessment	Maintainability	Mil Hdbk 2084	Jul-95	DEPARTMENT OF DEFENSE HANDBOOK: MAINTAINABILITY OF AVIONICS AND ELECTRONIC SYSTEMS AND EQUIPMENT (31 JUL 1995)		It covers the common maintainability design requirements to be used in military specifications for avionic and electronic systems and equipment.	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	G		TS	Maintainability Management
	17	Dependability & Safety	Engineering	Design & Assessment	Testability	Mil Hdbk 2165	Jul-95	DEPARTMENT OF DEFENSE: TESTABILITY HANDBOOK FOR SYSTEMS AND EQUIPMENTS		This standard prescribes a uniform approach to testability program planning, establishment of diagnostic concepts and testability (including BIT) requirements, testability and test design and assessment, and requirements for conducting testability program review.	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	G		TS	Testability
	17	Dependability & Safety	Engineering	Design & Assessment	Reliability	Mil Hdbk 251	Jan-78	MILITARY HANDBOOK: RELIABILITY/DESIGN THERMAL APPLICATIONS		It has been prepared specifically to guide engineers in the thermal design of electronic equipment with improved reliability. The primary purpose is to permit engineers and designers to design electronic equipment with adequate thermal performance	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	G		TS	Reliability Design Techniques

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	EG n°	Key area designation	Key area Perimeter (footnote 1)	Sub-domain Perimeter 1	Sub-domain Perimeter 2									Strength of the Std. (A : to be applied; G: Guide ; F: expected future evolution; (see footnotes 5,6,7)	Free comments		
17	Dependability & Safety	Engineering	Techniques & Methods	General	Mil Hdbk 338B Notice 1	Jun-07	Electronic Reliability Design Guide		This Handbook is actually an introduction and complete guide to Reliability and other Logistic engineering disciplines related to it, such as Maintainability and Testability. It addresses design processes, design guidelines, project verification methodologies, etc. providing both theoretical approaches and practical guidelines.	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	G		MS	Reliability Design Techniques	
17	Dependability & Safety	Management	Dependability		MIL Hdbk 470A notice 1	Jun-07	DESIGNING AND DEVELOPING MAINTAINABLE PRODUCTS AND SYSTEMS		It provides task descriptions for maintainability program. Software maintainability is not covered by this standard.	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	A		MS	Maintainability Management	
17	Dependability & Safety	Engineering	Design & Assessment	Maintainability	MIL Hdbk 472 Notice 1	Jan-84	MILITARY STANDARDIZATION HANDBOOK: MAINTAINABILITY PREDICTION		It presents 2 prediction methods, one for a early prediction and an other one for a detailed prediction, both applicable at any equipment or system level, at any level of maintenance, and for any maintenance concept pertinent to avionics, ground electronics, and shipboard electronics	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	G		TS	Maintainability Prediction	
17	Dependability & Safety	Test & Verification	Test Method		Mil Hdbk 781A	Apr-96	MILITARY HANDBOOK: RELIABILITY TEST METHODS, PLANS, AND ENVIRONMENTS FOR ENGINEERING, DEVELOPMENT QUALIFICATION, AND PRODUCTION		This standard specifies the general requirements and specific tasks for reliability testing during the development, qualification and production of systems and equipment. It establishes the tailorable requirements for reliability testing performed during integrated test programs	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	G		TS	Reliability Testing	
17	Dependability & Safety	Test & Verification	Test Method		Mil Std 690D	Jun-05	DEPARTMENT OF DEFENSE STANDARD PRACTICE: FAILURE RATE SAMPLING PLANS AND PROCEDURES		This standard provides procedures for failure rate (FR) qualification, sampling plans for establishing FR levels at selected confidence levels, and lot conformance inspection procedures associated with FR testing for the purpose of direct reference in appropriate military electronic parts established reliability (ER) specifications. Figures and tables throughout this standard are based on exponential distribution	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	G		TS	Reliability Testing	
17	Dependability & Safety	Management	Safety	General	MIL Std 882D	Feb-00	Standard Practice for System Safety		The system safety practice as defined in this standard provides a consistent means of evaluating identified risks. Mishap risk must be identified, evaluated, and mitigated to a level acceptable (as defined by the system user or customer) to the appropriate authority and compliant with laws and regulations, Executive Orders, treaties, and agreements.	US DOD	Yes	<a href="http://www.everyspec.com">www.everyspec.com</a>	A		MS	Safety Management Engineering Design Assessment Techniques	
17	Dependability & Safety	Engineering	Techniques & Methods	Reliability Prediction	NPRD 95	Apr-00	Non-Electronic Parts Reliability Data		It is the only document which provides failure rate data on a wide variety of electrical, electromechanical, and mechanical parts/ assemblies edited by the Reliability Information Analysis Center (RIAC).	RIAC	Yes	<a href="http://theriac.org">theriac.org</a>	G		TS	Reliability Prediction	
17	Dependability & Safety	Engineering	Techniques & Methods	Reliability Prediction	NSWC-94/L07	Mar-94	Handbook of Reliability Prediction Procedures for Mechanical Equipment		The handbook presents a new approach for determining the reliability and maintainability (R&M) characteristics of mechanical equipment	US DOD	Yes	<a href="http://theriac.org">theriac.org</a>	G		TS	Reliability Prediction	
17	Dependability & Safety	Management	Dependability & Safety		RG Aero 000 27	Jul-05	Programme Management - Guide to RAMS Management	Guide pour la construction et l'assurance de la sureté de fonctionnement	Specifies the principles to be implemented to manage a dependability and safety programme	BNAE	Yes	<a href="http://infostore.saiglobal.com/store/details.aspx?ProductID=951627">http://infostore.saiglobal.com/store/details.aspx?ProductID=951627</a>	G		MS	Dependability Safety Management	
17	Dependability & Safety	Engineering	Data Collection & Failure Analysis		RG Aero 000 33	Jul-05	Programme Management - Fracas: Failure Reporting Analysis And Corrective Actions System		They are good guides to define this process with plan, responsibility, which data, process of collection and analysis, entry data, analysis method, exit data, critical point, indicators	SAE	Yes	<a href="http://infostore.saiglobal.com/store/details.aspx?ProductID=951396">http://infostore.saiglobal.com/store/details.aspx?ProductID=951396</a>	G		TS	Data Collection FRACAS	
17	Dependability & Safety	Management	Dependability		SAE JA-1000	Jun-98	Reliability Program Standard		Provides information on how to manage reliability and maintainability programmes providing guidelines and methods for achieving high Availability and the required mission success for all military materiel using a RAM case approach	SAE	Yes	<a href="http://standards.sae.org/ja1000_199806">http://standards.sae.org/ja1000_199806</a>	A		MS	Reliability Management Assurance Case	

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	EG n°	Key area designation	Key area Perimeter (footnote 1)	Sub-domain Perimeter 1	Sub-domain Perimeter 2									Strength of the Std. (A : to be applied; G: Guide ; F: expected future evolution; (see footnotes 5,6,7)	Free comments		
17	Dependability & Safety	Management	Dependability			SAE JA-1000-1	Mar-99	Reliability Program Standard Implementation Guide		Provides information on how to manage reliability and maintainability programmes providing guidelines and methods for achieving high Availability and the required mission success for all military materiel using a RAM case approach	SAE	Yes	<a href="http://standards.sae.org/ja1000/1_199903/">http://standards.sae.org/ja1000/1_199903/</a>	G		MS	Reliability Management Assurance Case
17	Dependability & Safety	Management	Dependability			SAE JA-1010	Oct-00	Maintainability Program Standard		Provides information on how to manage reliability and maintainability programmes providing guidelines and methods for achieving high Availability and the required mission success for all military materiel using a RAM case approach	SAE	Yes	<a href="http://standards.sae.org/ja1010_200010">http://standards.sae.org/ja1010_200010</a>	A		MS	Maintainability Management Assurance Case
17	Dependability & Safety	Management	Dependability			SAE JA-1010-1	Aug-08	Maintainability Program Standard Implementation Guide		Provides information on how to manage reliability and maintainability programmes providing guidelines and methods for achieving high Availability and the required mission success for all military materiel using a RAM case approach	SAE	Yes	<a href="http://standards.sae.org/ja1010/1_200408">http://standards.sae.org/ja1010/1_200408</a>	G		MS	Maintainability Management Assurance Case
17	Dependability & Safety	Test & Verification	Reliability & Safety In service			STANAG 4158 Ed 1	May-94	Guidelines for classifying incidents for reliability estimation of tracked and wheeled vehicles		It establishes standard definitions and criteria for classifying incidents observed	NATO	Yes	<a href="http://www.nato.int/docu/stanag/aap006/part4.pdf">http://www.nato.int/docu/stanag/aap006/part4.pdf</a>	G		MS	In Service Reliability Maintainability
17	Dependability & Safety	Management	Dependability			STANAG 4174 Edition 3	Aug-08	Allied Reliability & Maintainability Publications		Provides information on how to manage reliability and maintainability programmes providing guidelines and methods for achieving high Availability and the required mission success for all military materiel using a RAM case approach	NATO	Yes	<a href="http://www.nato.int/docu/stanag/4174/stanag4174-ed3-e.pdf">http://www.nato.int/docu/stanag/4174/stanag4174-ed3-e.pdf</a>	G		MS	Reliability Maintainability Management Assurance Case
17	Dependability & Safety	Management	Safety	Munitions		STANAG 4297	Feb-01	Guidance on the assessment of the safety and suitability for service of munitions for NATO armed forces		Provide a uniform guide for the assessment of the safety and suitability of non-nuclear munitions for use by NATO armed forces.	NATO	Yes	<a href="http://www.nato.int">www.nato.int</a>	G		HS	Functional Safety Munitions Management
17	Dependability & Safety	Engineering	Techniques & Methods	Reliability Prediction		UTE-C 80811	Dec-10	Reliability Methodology for Electronic Defence Systems - Fides Guide		This FIDES method covers items varying from an elementary electronic component to a module or electronic subassembly including COTS. Calculation models take directly into account the influence of the real operational environment and the real constraints like temperature, thermal cycling, vibration or humidity rate seen by cards. The models can handle permanent working, on/off cycling and dormant applications.	UTE	Yes	<a href="http://www.ute-fr.com">www.ute-fr.com</a> <a href="http://fides-reliability.org/">http://fides-reliability.org/</a>	G		TS	Reliability Prediction

## Remarks:

- 1) Each Key Area is characterized by a perimeter which has been determined by Experts. Perimeters may be splitted into sub-domains if need arises
- 2) Name of the standardisation organisation / body that has the standard in its portfolio. This entry should be linked with a separate list of addresses of standardization organisations / bodies.
- 3) A standard selected as a best practice standard but not written in English will not be referenced in EHDP unless an English translation is available within 12 months
- 4) Web-address from where the standard can be downloaded or ordered
- 5) "A" standard : this standard shall be the first choice for application for the given scope.
- 6) "G" standard : this standard will provide overall guidance on requirements, procedures, standards in the given technical domain.
- 7) "F" standard: Inclusion or evolution of a national standard into an European or International standard is intended

## 8) Categories of standards :

- MS = Management/Quality/Organization standard/Conformity assessment  
 HS = Horizontal/transversal standards (fundamental/generic/systems/Methodology;Terminology)  
 IS = Interoperability/Interface standards  
 TS = Technical/performance standards