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BS EN 61513:2013



BSI Standards Publication

Nuclear power plants — Instrumentation and control important to safety — General requirements for systems

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This British Standard is the UK implementation of EN 61513:2013. It is identical to IEC 61513:2011. It supersedes BS IEC 61513:2011 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee NCE/8, Reactor instrumentation.

A list of organizations represented on this committee can be obtained on request to its secretary.

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EUROPÄISCHE NORM

February 2013

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English version

**Nuclear power plants -
Instrumentation and control important to safety -
General requirements for systems
(IEC 61513:2011)**

Centrales nucléaires de puissance -
Instrumentation et contrôle-commande
importants pour la sûreté -
Exigences générales pour les systèmes
(CEI 61513:2011)

Kernkraftwerke -
Leittechnik für Systeme mit
sicherheitstechnischer Bedeutung -
Allgemeine Systemanforderungen
(IEC 61513:2011)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

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Foreword

This document (EN 61513:2013) consists of the text of IEC 61513:2011 prepared by SC 45A "Instrumentation and control of nuclear facilities" of IEC/TC 45 "Nuclear instrumentation".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2014-01-14
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2016-01-14

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As stated in the nuclear safety directive 2009/71/EURATOM, Chapter 1, Article 2, item 2, Member States are not prevented from taking more stringent safety measures in the subject-matter covered by the Directive, in compliance with Community law. In a similar manner, this European Standard does not prevent Member States from taking more stringent nuclear safety measures in the subject-matter covered by this standard.

Endorsement notice

The text of the International Standard IEC 61513:2011 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61508-1:2010	NOTE	Harmonized as EN 61508-1:2010 (not modified).
IEC 61508-3:2010	NOTE	Harmonized as EN 61508-3:2010 (not modified).
IEC 61069-1:1991	NOTE	Harmonized as EN 61069-1:1993 (not modified).
IEC 62381	NOTE	Harmonized as EN 62381.
IEC 61000-6-2	NOTE	Harmonized as EN 61000-6-2.
IEC 61000-6-4	NOTE	Harmonized as EN 61000-6-4.
ISO 9000:2005	NOTE	Harmonized as EN ISO 9000:2005 (not modified).
ISO 8402:1994	NOTE	Harmonized as EN ISO 8402:1995 (not modified).

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(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60671	-	Nuclear power plants - Instrumentation and control systems important to safety - Surveillance testing	EN 60671	-
IEC 60709	-	Nuclear power plants - Instrumentation and control systems important to safety - Separation	EN 60709	-
IEC 60780	-	Nuclear power plants - Electrical equipment of the safety system - Qualification	EN 60780	-
IEC 60880	2006	Nuclear power plants - Instrumentation and control systems important to safety - Software aspects for computer-based systems performing category A functions	EN 60880	2009
IEC 60964	2009	Nuclear power plants - Control rooms - Design	EN 60964	2010
IEC 60965	-	Nuclear power plants - Control rooms - Supplementary control points for reactor shutdown without access to the main control room	EN 60965	-
IEC 60980	-	Recommended practices for seismic qualification of electrical equipment of the safety system for nuclear generating stations	-	-
IEC 60987 (mod)	2007	Nuclear power plants - Instrumentation and control important to safety - Hardware design requirements for computer-based systems	EN 60987	2009
IEC 61000-4-1	-	Electromagnetic compatibility (EMC) - Part 4-1: Testing and measurement techniques - Overview of IEC 61000-4 series	EN 61000-4-1	-
IEC 61000-4-2	-	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	-
IEC 61000-4-3	-	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	-
IEC 61000-4-4	-	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	-

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IEC 61000-4-5	-	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	-
IEC 61000-4-6	-	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	-
IEC 61226	2009	Nuclear power plants - Instrumentation and control important to safety - Classification of instrumentation and control functions	EN 61226	2010
IEC 61500	-	Nuclear power plants - Instrumentation and control important to safety - Data communication in systems performing category A functions	EN 61500	-
IEC 61508-2	2010	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 2: Requirements for electrical/electronic/programmable electronic safety-related systems	EN 61508-2	2010
IEC 61508-4	2010	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 4: Definitions and abbreviations	EN 61508-4	2010
IEC 62138	2004	Nuclear power plants - Instrumentation and control important for safety - Software aspects for computer-based systems performing category B or C functions	EN 62138	2009
IEC 62340	-	Nuclear power plants - Instrumentation and control systems important to safety - Requirements for coping with common cause failure (CCF)	EN 62340	-
ISO 9001	2008	Quality management systems - Requirements	EN ISO 9001	2008
IAEA INSAG-10	1996	Defence in depth in nuclear safety	-	-
IAEA NS-R-1	2000	Safety of nuclear power plants: Design	-	-
IAEA GS-R-3	2006	The management system for facilities and activities - Safety requirements	-	-
IAEA GS-G-3.1	2006	Application for the management system for facilities and activities - Safety Guide	-	-
IAEA NS-G-1.3	2002	Instrumentation and control systems important to safety in nuclear power plants	-	-
IAEA 75-INSAG-3 Rev.1 - INSAG 12	1999	Basic safety principles for nuclear power plants	-	-

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