



**SLOVENSKI STANDARD**  
**oSIST prEN IEC 62988:2022**  
**01-junij-2022**

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**Jedrske elektrarne - Merilna in nadzorna oprema za zagotavljanje varnosti - Izbira in uporaba brezžičnih naprav**

Nuclear power plants - Instrumentation and control systems important to safety - Selection and use of wireless devices

Kernkraftwerke - Leittechnische Systeme mit sicherheitstechnischer Bedeutung - Auswahl und Einsatz drahtloser Geräte

Centrales nucléaires de puissance - Systèmes d'instrumentation et de contrôle-commande importants pour la sûreté - Sélection et utilisation des appareils sans fil

**Ta slovenski standard je istoveten z: prEN IEC 62988:2022**

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**ICS:**

27.120.20 Jedrske elektrarne. Varnost Nuclear power plants. Safety

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN IEC 62988**

April 2022

ICS 27.120.20

English Version

**Nuclear power plants - Instrumentation and control systems  
important to safety - Selection and use of wireless devices  
(IEC 62988:2018)**

Centrales nucléaires de puissance - Systèmes  
d'instrumentation et de contrôle-commande importants pour  
la sûreté - Sélection et utilisation des appareils sans fil  
(IEC 62988:2018)

Kernkraftwerke - Leittechnische Systeme mit  
sicherheitstechnischer Bedeutung - Auswahl und Einsatz  
drahtloser Geräte  
(IEC 62988:2018)

This draft European Standard is submitted to CENELEC members for enquiry.  
Deadline for CENELEC: 2022-07-01.

The text of this draft consists of the text of IEC 62988:2018 (45A/1187/FDIS).

If this draft becomes a European Standard, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CENELEC in three official versions (English, French, German).  
A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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Project: 75690

Ref. No. prEN IEC 62988:2022 E

**prEN IEC 62988:2022 (E)****European foreword**

This document (prEN IEC 62988:2022) consists of the text of document IEC 62988:2018, prepared by IEC/TC 45 "Instrumentation, control and electrical power systems of nuclear facilities"

This document is currently submitted to the CENELEC Enquiry.

The following dates are proposed:

- latest date by which the existence of this document (doa) dor + 6 months  
has to be announced at national level
- latest date by which this document has to be (dop) dor + 12 months  
implemented at national level by publication of an  
identical national standard or by endorsement
- latest date by which the national standards (dow) dor + 36 months  
conflicting with this document have to be withdrawn (to be confirmed or  
modified when voting)

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 and/or security measures in the subject-matter covered by this standard.

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

IEC 61000-4-3	NOTE	Harmonized as EN IEC 61000-4-3
IEC 61226	NOTE	Harmonized as EN IEC 61226
IEC 62003	NOTE	Harmonized as EN IEC 62003
IEC 62657-1:2017	NOTE	Harmonized as EN 62657-1:2017 (not modified)
IEC 62657-2:2017	NOTE	Harmonized as EN 62657-2:2017 (not modified)

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60987	2007	Nuclear power plants - Instrumentation and control important to safety - Hardware design requirements for computer-based systems	EN 60987	2015
IEC 61513	2011	Nuclear power plants - Instrumentation and control important to safety - General requirements for systems	EN 61513	2013
IEC 62138	-	Nuclear power plants - Instrumentation and control systems important to safety - Software aspects for computer-based systems performing category B or C functions	EN IEC 62138	-
IEC 62645	-	Nuclear power plants - Instrumentation, control and electrical power systems - Cybersecurity requirements	EN IEC 62645	-
IEC 62671	-	Nuclear power plants - Instrumentation and control important to safety - Selection and use of industrial digital devices of limited functionality		-
IEC/IEEE 60780-323	-	Nuclear facilities - Electrical equipment important to safety - Qualification	EN 60780-323	-

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Edition 1.0 2018-05

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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iTeh STANDARD

**Nuclear power plants – Instrumentation and control systems important to safety – Selection and use of wireless devices**

**Centrales nucléaires de puissance – Systèmes d'instrumentation et de contrôle-commande importants pour la sûreté – Sélection et utilisation des appareils sans fil**

<https://standards.iteh.ai/catalog/standards/sist/26c1b592-5771-4ddc-a143-fa9e8193a9f8/osist-pren-iec-62988-2022>

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**NUCLEAR POWER PLANTS – INSTRUMENTATION AND CONTROL  
SYSTEMS IMPORTANT TO SAFETY – SELECTION  
AND USE OF WIRELESS DEVICES**

## FOREWORD

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International Standard IEC 62988 has been prepared by subcommittee 45A: Instrumentation, control and electrical power systems of nuclear facilities, of IEC technical committee 45: Nuclear instrumentation.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
45A/1187/FDIS	45A/1198/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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## INTRODUCTION

### a) Technical background, main issues and organization of this document

This document sets out requirements applicable to wireless devices that are used to perform functions important to safety in nuclear power plants (NPPs).

It is intended that this document be used by operators of NPPs (utilities), systems evaluators and by licensors.

### b) Situation of this document in the structure of the IEC SC 45A standard series

IEC 62988 is a third level IEC SC 45A document covering the selection and use of wireless devices in instrumentation and control (I&C) systems important to safety used in NPPs.

For more details on the structure of the IEC SC 45A standard series, see item d) of this introduction.

### c) Recommendations and limitations regarding the application of this document

It is important to note that this document is applicable to all important to safety systems containing wireless devices, including systems performing category A and B functions (and in such systems, wireless devices are prohibited by this document). Therefore, only systems performing category C functions are required to follow the requirements of this document.

To ensure that this document will continue to be relevant in future years, the emphasis has been placed on issues of principle, rather than specific technologies.

### d) Description of the structure of the IEC SC 45A standard series and relationships with other IEC documents and other bodies' documents (IAEA, ISO)

The top-level documents of the IEC SC 45A standard series are IEC 61513 and IEC 63046. IEC 61513 provides general requirements for I&C systems and equipment that are used to perform functions important to safety in NPPs. IEC 63046 provides general requirements for electrical power systems of NPPs; it covers power supply systems including the supply systems of the I&C systems. IEC 61513 and IEC 63046 are to be considered in conjunction and at the same level. IEC 61513 and IEC 63046 structure the IEC SC 45A standard series and shape a complete, coherent et consistent framework establishing general requirements for instrumentation, control and electrical systems for nuclear power plants.

IEC 61513 and IEC 63046 refer directly to other IEC SC 45A standards for general topics related to categorization of functions and classification of systems, qualification, separation, defence against common cause failure, control room design, electromagnetic compatibility, cybersecurity, software and hardware aspects for programmable digital systems, coordination of safety and security requirements and management of ageing. The standards referenced directly at this second level should be considered together with IEC 61513 and IEC 63046 as a consistent document set.

At a third level, IEC SC 45A standards not directly referenced by IEC 61513 or by IEC 63046 are standards related to specific equipment, technical methods, or specific activities. Usually these documents, which make reference to second-level documents for general topics, can be used on their own.

A fourth level extending the IEC SC 45 standard series, corresponds to the Technical Reports, which are not normative.