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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

Maintenance - Qualification of maintenance personnel

Maintenance - Qualification du personnel de la
maintenance

Instandhaltung - Qualifikation des
Instandhaltungspersonals

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 319.

If this draft becomes a European Standard, CEN 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 CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN 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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 15628:2024) has been prepared by Technical Committee CEN/TC 319 “Maintenance”, the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 15628:2014.

EN 15628:2024 includes the following significant technical changes with respect to EN 15628:2014:

- revision of the structure to make the document consistent with EN 17007 describing the maintenance process;
- determine the knowledge required according to the maintenance actions to be performed;
- full consideration of the recommendation included in the European Qualification Framework (*Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning*) [4].

Introduction

Due to the growing extent and the increasing complexity of maintenance in the European industry, very diverse occupational profiles have evolved for maintenance personnel in the different member states. This document specifies requirements such as competences, skills and knowledge as well as basic and target qualifications. These requirements are recommended to obtain a specific qualification and to ensure highly qualified professional personnel at the different functions and/or positions in maintenance.

1 Scope

This document specifies the qualification of the personnel with regard to the tasks to be performed in the context of the maintenance of plant, infrastructure and production systems and to fulfil the requirement of the maintenance job, in the modern and digital world.

This document guides the definition of the knowledge, skills, and competencies required for the qualification of maintenance personnel. These guidelines can be used for personnel training and career planning, as well as a guide for the basis for personnel certification, as an example of the assessment and approval of personnel through personnel certification.

This document covers the following professional persons in the maintenance organization:

- Maintenance Technician Specialist;
- Maintenance Supervisor;
- Maintenance Engineer;
- Maintenance Manager (Responsible of Maintenance Function or Service).

These denominations can be adapted based on company practices and operational organization. An example of a structured way of organizing maintenance in an organization can be seen in Annex A.

This document does not specify the verification criteria nor the specialized training of the personnel, which is related to the specific industrial and building sectors.

NOTE Specialization and profession are the subject of the training carried out in the relevant sector.

2 Normative references

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.

EN 13306:2017, *Maintenance — Maintenance terminology*

EN ISO 9000:2015, *Quality management systems — Fundamentals and vocabulary (ISO 9000:2015)*

EN ISO 14001:2015, *Environmental management systems — Requirements with guidance for use (ISO 14001:2015)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13306:2017, EN ISO 9000:2015, EN ISO 14001:2015 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

competence

proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development

Note 1 to entry: Competence is described in terms of responsibility and autonomy.

[SOURCE: EU Recommendation 2008/C 111/01 [4], Annex A, (i), modified — The present Note 1 to entry was a sentence that completed the original definition.]

3.2

knowledge

outcome of the assimilation of information through learning

Note 1 to entry: Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study.

[SOURCE: EU Recommendation 2008/C 111/01 [4], Annex A, (g), modified — The present Note 1 to entry was a sentence that completed the original definition.]

3.3

level of qualification

classification of qualifications according to different professional persons: Maintenance Technician Specialist, Maintenance Supervisor and/or Maintenance Engineer, Maintenance Manager (Responsible for Maintenance Function or Service)

3.4

procedure

document and instructions which indicate standardized practices, operational instructions and technical rules referred to the involved competence

3.5

qualification

formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards

[SOURCE: EU Recommendation 2008/C 111/01 [4], Annex A, (a)]

Note 1 to entry: The types of qualification, subject of this document and outlined below, are consistent with the European Qualifications Framework for lifelong learning (EQF) [4]. Specifically, the maintenance personnel has adequate competences, skills and knowledge to operate safely, properly, effectively and efficiently, as described in Clause 4.

3.6

skills

ability to apply knowledge and use know-how to complete tasks and solve problems

Note 1 to entry: Skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments).

[SOURCE: EU Recommendation 2008/C 111/01 [4], Annex A, (h), modified — The present Note 1 to entry was a sentence that completed the original definition.]

3.7

maintenance technician specialist

person responsible for the availability and good physical condition of equipment/items, who carries out observations and active preventive and corrective maintenance tasks on the items in compliance with applicable laws, directives, operational instructions and commonly accepted good practices

3.8**maintenance supervisor**

person responsible for implementing, controlling and supervising the maintenance activities carried out by maintenance technicians and/or subcontracting companies, in close relationship with other stakeholders (management, operations, support services, etc.)

3.9**maintenance engineer**

person who applies engineering concepts to consider maintenance during design, ensure proper operation and condition of items, help resolve maintenance issues, and guide other stakeholders (technicians, supervisors, managers, etc.) to achieve the objectives

3.10**maintenance manager**

person responsible for defining the maintenance policy and strategy, directing, controlling, and coordinating maintenance activities to achieve the objectives defined in the maintenance policy and strategy

4 Competences for personnel of maintenance**4.1 General**

Competencies have long been used as a framework to help focus employee's behaviour on things that matter most to an organization and help drive success. For managers, they provide resources to help them to recruit and develop employees and provide feedback to guide continuous improvement performance.

4.2 Competences of a Maintenance Technician Specialist

The competences of the maintenance technician specialist consist in the execution of maintenance tasks, including the following key competences:

- perform or ensure the safe execution of the maintenance plans according to business strategies;
- act promptly in case of failure or malfunction, ensuring the effectiveness of the restoration;
- perform or ensure the proper execution according to laws, rules and procedures relating to safety, health and environmental protection;
- ensure the availability of materials, tools and equipment necessary for the execution of maintenance tasks;
- ensure the quality of the maintenance tasks;
- coordinate and / or supervise on-site maintenance tasks;
- use or domain of of ICT (Information and communication technology) systems, CMMS, etc...

NOTE Tentatively, this professional person can refer to the EQF levels 4 or 5.

4.3 Competences of a maintenance supervisor

The Maintenance Supervisor normally work in the level of asset management system and management the processes to achieve the objectives, with specific roles which can be executed exclusively or in a joint responsibility.