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**BSI Standards Publication** 

Live working — Guidelines for the installation of transmission and distribution line conductors and earth wires — Stringing equipment and accessory items



## National foreword

This Published Document is the UK implementation of IEC TR 61328:2017. It supersedes PD IEC/TR 61911:2003 and PD IEC TR 61328:2003, which are withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PEL/78, Tools for live working.

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

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# TECHNICAL REPORT



Live working – Guidelines for the installation of transmission and distribution line conductors and earth wires – Stringing equipment and accessory items

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### LIVE WORKING – GUIDELINES FOR THE INSTALLATION OF TRANSMISSION AND DISTRIBUTION LINE CONDUCTORS AND EARTH WIRES – STRINGING EQUIPMENT AND ACCESSORY ITEMS

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IEC TR 61328, which is a Technical Report, has been prepared by IEC technical committee 78: Live working.

This third edition cancels and replaces the second edition published in 2003 and IEC TR 61911:2003. It incorporates some technical changes to update equipment work methods and procedures, bringing them in line with the state of the art.

The text of this Technical Report is based on the following documents:

Enquiry draft	Report on voting
78/1145/DTR	78/1174/RVDTR

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

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

Terms defined in Clause 3 are given in *italic* print throughout this standard.

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

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- withdrawn,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

A bilingual version of this publication may be issued at a later date.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

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#### INTRODUCTION

With the increased difficulty of de-energizing existing overhead lines, installing *conductors* or *earth wire* in *circuits* nearby, or crossing these existing *circuits*, creates hazards requiring special considerations particularly with regard to earthing and bonding. It is also important to provide protections against induced static charge due to atmospheric conditions, lightning strikes, or accidental energization.

These potential electrical hazards demand that certain requirements be observed when choosing equipment and work methods for the protection of personnel or equipment.

#### LIVE WORKING – GUIDELINES FOR THE INSTALLATION OF TRANSMISSION AND DISTRIBUTION LINE CONDUCTORS AND EARTH WIRES – STRINGING EQUIPMENT AND ACCESSORY ITEMS

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#### 1 Scope

This document, which is a Technical Report, provides recommendations for the selection and testing where necessary of *conductor stringing* equipment and accessory items used for the installation of bare and insulated overhead distribution *conductors*, bare overhead transmission *conductors* and overhead *earth wires*.

Procedures are recommended for proper earthing in order to protect equipment, components and personnel from currents which can result from accidental contact with nearby *energized conductors* or from the induced or *fault currents* which can result in some circumstances.

The items of equipment under consideration in this document are used for transmission and distribution systems.

#### 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.

IEC 60050-466, International Electrotechnical Vocabulary – Chapter 466: Overhead lines (available at www.electropedia.org)

IEC 60050-651, International Electrotechnical Vocabulary – Part 651: Live working (available at www.electropedia.org)

IEC 60743, Live working – Terminology for tools, devices and equipment

#### 3 Terms and definitions

NOTE Terminology for equipment and procedures associated with the installation of overhead *conductors* and *earth wires* varies widely throughout the utility industry.

For the purposes of this document, the terms and definitions given in IEC 60050-466, IEC 60050-651, IEC 60743 and the following apply.

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

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