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Project No. 2025/00860

Responsible committee: PEL/21 Secondary cells and batteries

Interested committees:

Title: BS EN 63056 Ed.2.0 Draft Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries for use in electrical energy storage systems.

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- iii) requires additional national guidance or information

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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 Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.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.                                       |                                                    |



PROJECT NUMBER:

**IEC 63056 ED2**

DATE OF CIRCULATION:

**2025-04-25**

CLOSING DATE FOR COMMENTS:

**2025-06-20**

SUPERSEDES DOCUMENTS:

**21A/873/RR**

IEC SC 21A : SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES

SECRETARIAT:

France

SECRETARY:

Mr Jean-Marie Bodet

OF INTEREST TO THE FOLLOWING COMMITTEES:

TC 21, TC 120

HORIZONTAL FUNCTION(S):

ASPECTS CONCERNED:

Safety

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

Recipients of this document are invited to submit, with their comments, notification of any local regulations or technical reasons that may exist and should be considered should this proposal proceed, recognizing that failure to address such requirements could result in the need for new or existing "In Some Countries" clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:

**Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries for use in electrical energy storage systems**

NOTE FROM TC/SC OFFICERS:

After three meetings of the project team including 26 members from IEC SC21A WG5 and the resolution of internal comments from the team to reach an agreement on the text of the first CD, the clean version of the CD is proposed for onboarding in OSD and going to the commenting phase from the NC.

## Link to Committee Draft (CD) online document:

<https://osd.iec.ch/#/editor/archive/33927370-550e-553e-e063-1410000a1c51/en/CD/1>

## How to access

This link leads you to the Online Standards Development (OSD) platform for National Mirror Committee's (NMC) comments. The project draft may be found further down this document.

## Resource materials

We recommend NCs to review the available materials to better understand the member commenting on the OSD platform. This includes the:

- OSD NC roles overview: [here](#)
- How to add and submit comments to the IEC: [here](#)

## Contact

Should you require any assistance, please contact the IEC IT Helpdesk at [helpdesk@iec.ch](mailto:helpdesk@iec.ch).

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries for use in electrical energy storage systems –**

#### FOREWORD

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IEC 63056 has been prepared by subcommittee 21A: Secondary cells and batteries containing alkaline or other non-acid electrolytes, of IEC technical committee 21: Secondary cells and batteries. It is an International Standard.

This second edition cancels and replaces the first edition published in 2020. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) ...;

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

| Draft      | Report on voting |
|------------|------------------|
| XX/XX/FDIS | XX/XX/RVD        |

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English [change language if necessary].

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [http://www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at <http://www.iec.ch/publications>.

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, or
- revised.

## INTRODUCTION

This document covers safety requirements for secondary lithium cells and batteries for use in Electrical Energy Storage Systems and is under the umbrella standard IEC 62619 as shown in [Figure 1](#). As an umbrella standard, IEC 62619 had been developed which covered various industrial applications in 2017.

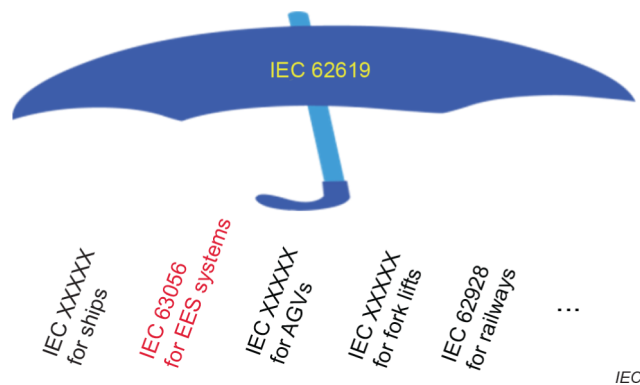


**Figure 1 – IEC 62619 as umbrella standard to various industrial applications**

## 1 Scope

This document specifies requirements and tests for the product safety of secondary lithium cells and batteries used in electrical energy storage systems (Figure 2) with a maximum DC voltage of 1 500 V.

Basic safety requirements for the secondary lithium cells and batteries used in industrial applications are included in IEC 62619. This document provides additional or specific requirements for electrical energy storage systems.

Since this document covers batteries for various electrical energy storage systems, it includes those requirements which are common and minimum to the electrical energy storage systems.

The scope of this document covers batteries to be used by professional and non-professional users. Where applicable, requirements are separated between these user groups.

Examples of battery systems appliances that are within the scope of this document are:

- telecommunications,
- central emergency lighting and alarm systems,
- stationary engine starting,
- photovoltaic systems,
- home (residential) energy storage systems (HESS), and
- large energy storage: on-grid/off-grid,
- uninterruptible power supplies

This document does not apply to portable systems, or battery system below 500 Wh, which are covered by IEC 61960-3 [1].

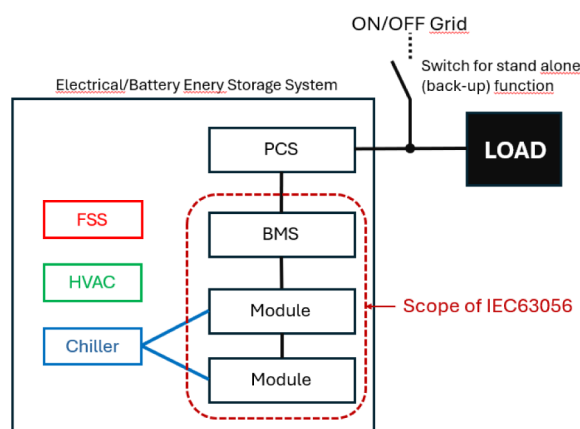


Figure 2 – Scope example of IEC 63056 with single battery system

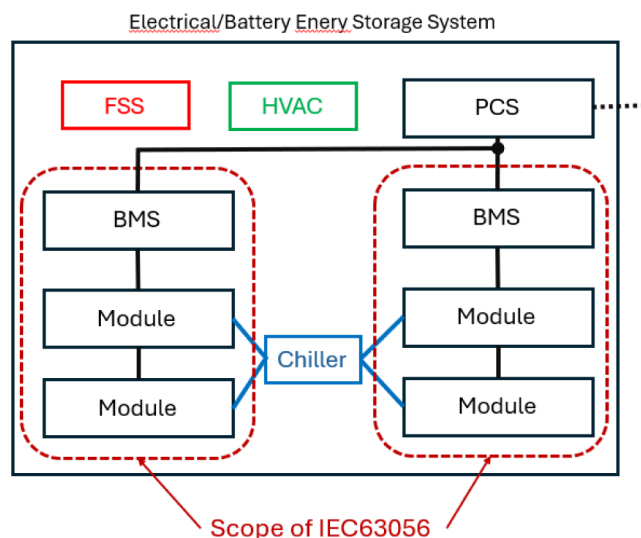


**Figure 3 – Scope example of IEC 63056 with several battery systems**

## 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 60050-482, *International Electrotechnical Vocabulary (IEV) - Part 482: Primary and secondary cells and batteries* (available at <http://www.electropedia.org/>)

IEC 60364-4-41:2005, *Low-voltage electrical installations - Part 4-41: Protection for safety - Protection against electric shock*

IEC 60664-1:2020, *Insulation coordination for equipment within low-voltage supply system - Part 1: Principles, requirements and tests*

IEC 60695-10-2, *Fire hazard testing - Part 10-2: Abnormal heat - Ball pressure test method*

IEC 60695-11-10, *Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods*

IEC 60730-1:2022, *Automatic electrical controls - Part 1: General requirements*

IEC 60950-1:2005, *Information technology equipment - Safety - Part 1: General requirements*

IEC 61508, *Functional safety of electrical/electronic/programmable electronic safety-related systems*

IEC 62477-1:2022, *Safety requirements for power electronic converter systems and equipment - Part 1: General*

IEC 62619, *Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries, for use in industrial applications*

IEC 62620:2014, *Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for use in industrial applications*