



SLOVENSKI STANDARD
oSIST prEN IEC 63338:2023
01-junij-2023

Splošno navodilo za ponovno uporabo in spremembo namena sekundarnih členov in baterij

General guidance on reuse and repurposing of secondary cells and batteries

iTeh STANDARD PREVIEW

Recommandations générales relatives à la réutilisation et à la réaffectation des accumulateurs et des batteries d'accumulateurs

Ta slovenski standard je istoveten z: prEN IEC 63338:2023

ICS:

29.220.01	Galvanski členi in baterije na splošno	Galvanic cells and batteries in general
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oSIST prEN IEC 63338:2023

en



21A/831/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

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DATE OF CIRCULATION: 2023-03-24	CLOSING DATE FOR VOTING: 2023-06-16
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IEC SC 21A : SECONDARY CELLS AND BATTERIES CONTAINING ALKALINE OR OTHER NON-ACID ELECTROLYTES	
SECRETARIAT: France	SECRETARY: Mr Pierre Bourg
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 21, TC 120	PROPOSED HORIZONTAL STANDARD: <input checked="" type="checkbox"/> Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: <input type="checkbox"/> EMC <input checked="" type="checkbox"/> ENVIRONMENT <input type="checkbox"/> QUALITY ASSURANCE <input checked="" type="checkbox"/> SAFETY	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING

This document is still under study and subject to change. It should not be used for reference purposes.

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,
- any relevant "in some countries" clauses to be included should this proposal proceed. Recipients are reminded that the enquiry stage is the final stage for submitting "in some countries" clauses. See AC/22/2007.

TITLE:

General guidance on reuse and repurposing of secondary cells and batteries

PROPOSED STABILITY DATE: 2026

NOTE FROM TC/SC OFFICERS:

During the WG6 October meeting held in San Francisco it was decided to circulate the 63338 CDV according to 21A/804B/CC

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

63

64

GENERAL GUIDANCE FOR REUSE AND REPURPOSING OF SECONDARY CELLS AND BATTERIES

65

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FOREWORD

69 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization

70 comprising all national electrotechnical committees (IEC National Committees). The object of IEC is

71 to promote international co-operation on all questions concerning standardization in the electrical

72 and electronic fields. To this end and in addition to other activities, IEC publishes International

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98 IEC Publication or any other IEC Publications.

99 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced

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104 International Standard IEC XXXXX has been prepared by subcommittee XX: TITLE, of IEC

105 technical committee XX:XXX.

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

107

FDIS	Report on voting
XX/XX/FDIS	XX/XX/RVD

108

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

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

112 The committee has decided that the contents of this document will remain unchanged
113 until the stability date indicated on the IEC website under "http://webstore.iec.ch"
114 in the data related to the specific document. At this date, the document will be
115 • reconfirmed,
116 • withdrawn,
117 • replaced by a revised edition, or
118 amended.
119 •
120

121 The National Committees are requested to note that for this document the stability
122 date is 20XX..

123 THIS TEXT IS INCLUDED FOR THE INFORMATION OF THE NATIONAL COMMITTEES AND WILL BE DELETED AT THE
124 PUBLICATION STAGE.

125

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INTRODUCTION

127 Based on the principles of life cycle thinking (LCT) and environmentally conscious design (ECD),
128 secondary battery reuse and repurposing are means to reduce raw material consumption.
129 However, there are potential safety risks to be considered before reusing or repurposing a
130 battery. These should be thoroughly addressed before considering any kind of reuse or
131 repurposing operations. Further, all reused or repurposed batteries or sub-units of batteries
132 shall comply with all safety, transport and product testing at the same level as new battery
133 products (except tests requiring destructive sampling).

134 The primary purpose of this document is intended to provide: basic guidance on the
135 environmental aspects of reuse and repurposing of relevant cells and batteries; basic guidance
136 on safety risks for the reuse and repurposing of relevant cells and batteries; basic guidance on
137 original manufacturer caution statements on the applicability of a product for reuse or
138 repurposing; and useful information regarding reuse and repurposing and relevant cell and
139 battery regulations and standards to interested parties.

140 Additionally, various regions and countries are currently developing requirements and
141 regulations for the reuse and repurposing of secondary cells and batteries, especially those
142 used for the propulsion of electric road vehicles, after being extracted at their end of life. These
143 differing requirements and regulations could lead to technical or safety issues in the use of
144 these batteries. Thus, nations and regions can be assisted in setting up secondary battery reuse
145 and repurposing regulations from this aligned international standard.

146 The expected users of this document are: original manufacturers (including cell and battery or
147 application), qualified reuse and repurposed application manufacturers (e.g. with approval in
148 writing to reuse or repurpose from the original manufacturer); national, regional, and local
149 authorities that establish secondary battery reuse and repurposing regulations; and national,
150 regional, and local authorities that revise secondary battery reuse and repurposing regulations.

151 However, other stakeholders are not precluded from using this document.

152 National and regional standards, regulations and voluntary stewardship programs are given
153 priority in the matters covered in this document.

154 **GENERAL GUIDANCE ON REUSE AND REPURPOSING OF SECONDARY**
 155 **CELLS AND BATTERIES**
 156
 157

158 **Scope**

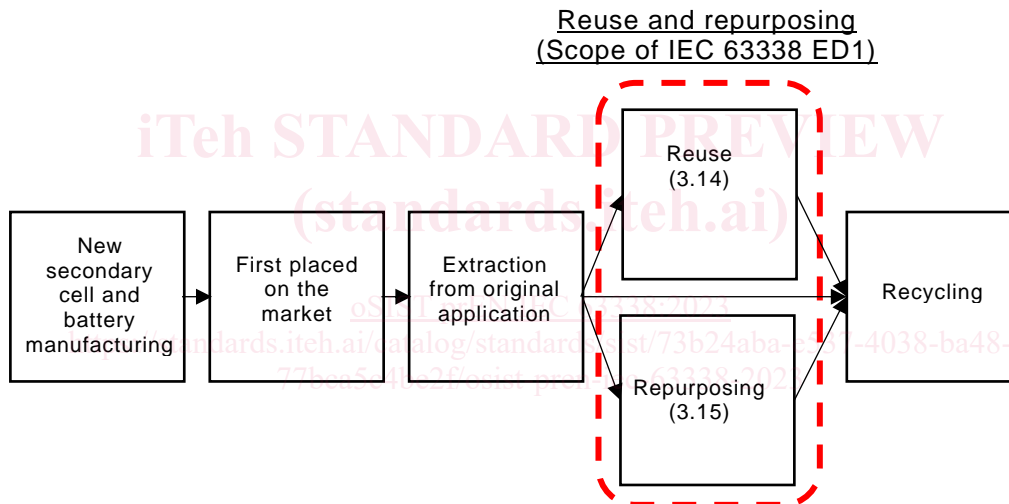
159 This document applies to the reuse and repurposing of secondary lithium ion and nickel metal-
 160 hydride cells and batteries after extraction from the application for which they were first placed
 161 on the market (hereafter “relevant cells and batteries”).

162 NOTE 1: This document does not permit reuse or repurposing of single cells or cell assemblies if battery lifetime
 163 traceability data are not recorded. See clause 4.

164 NOTE 2: Swappable batteries such as those used in e-scooters are removed and installed by the user (such as for
 165 charging) without conducting a safety assessment (such as battery lifetime traceability data assessment) as part of
 166 intended use, which is not considered reuse or repurposing.

167 NOTE 3: This document does not cover system component reuse and repurposing. The original manufacturer can be
 168 contacted to confirm suitability of components for reuse and repurposing

169



170

Figure 1 – Scope of IEC 63338 ED1

171 **Normative references**

172 There are no normative references in this document.

173

174 Terms and definitions

175 For the purposes of this document, the following terms and definitions apply.

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

- 178 • IEC Electropedia: available at <http://www.electropedia.org/>
- 179 • ISO Online browsing platform: available at <http://www.iso.org/obp>

180 3.1 181 product

182 goods or service

183 [SOURCE: IEC 63218:2021, definition 3.1 modified]

184 3.2 185 electric road vehicle

186 electric vehicle with only a traction battery as power source for vehicle propulsion (battery
187 electric vehicle) or vehicle with both a rechargeable energy storage system and a fuelled power
188 source for propulsion (hybrid electric vehicle)

189 [SOURCE: IEC 62660-1 2018 ED2, definitions 3.1, 3.2 modified]

190 3.3 191 waste battery

192 cells or batteries which the holder discards or intends or is required to discard

193 Note 1 to entry: assessment of used batteries for possibility to repurpose is included in IEC 63330 ED1

194 [SOURCE: IEC 63218:2021, definition 3.2 modified]

195 3.4 196 environment

197 surroundings in which an organization operates, including air, water, land, natural resources,
198 flora, fauna, humans, and their interrelationships

199 Note 1 to entry: Surroundings in this context extend from within an organization to the global system.

200 [SOURCE: IEC 63218:2021, definition 3.3]

201 3.5 202 environmental aspect

203 element of an organization's activities or products that interacts or can interact with the
204 environment

205 Note 1 to entry: An environmental aspect can cause (an) environmental impact(s). A significant environmental aspect
206 is one that has or can have one or more significant environmental impact(s).

207 Note 2 to entry: Significant environmental aspects are determined by the organization applying one or more criteria.

208 Note 3 to entry: Activities of the organization are those related to the design and development.

209 [SOURCE: IEC60050-901:2013, 901-07-02, modified]

210 3.6 211 environmental impact

212 change to the environment, whether adverse or beneficial, wholly or partly resulting from a
213 product environmental aspect

214 [SOURCE: IEC 60050-904:2014, 904-01-03 modified]