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STN	**Analýza primárnej príčiny (RCA).**	**STN** **EN 62740** 01 0688

Root cause analysis (RCA)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/15

Obsahuje: EN 62740:2015, IEC 62740:2015

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62740

April 2015

ICS 03.120.01

English Version

Root cause analysis (RCA)
(IEC 62740:2015)

Analyse de cause initiale (RCA)
(IEC 62740:2015)

Ursachenanalyse
(IEC 62740:2015)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 62740:2015 E

Foreword

The text of document 56/1590/FDIS, future edition 1 of IEC 62740, prepared by IEC/TC 56 "Dependability" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62740:2015.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2015-12-20
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2018-03-20

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

IEC 60300-1	NOTE	Harmonized as EN 60300-1.
IEC 61025	NOTE	Harmonized as EN 61025.
IEC 61649	NOTE	Harmonized as EN 61649.
IEC 61163-1	NOTE	Harmonized as EN 61163-1.
IEC 62508:2010	NOTE	Harmonized as EN 62508:2010 (not modified).
ISO/IEC 31010:2009	NOTE	Harmonized as EN 31010:2010 (not modified).

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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.

Publication	Year	Title	EN/HD	Year
IEC 60050 Series	-	International Electrotechnical Vocabulary (IEV)	-	-

IEC 62740

Edition 1.0 2015-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Root cause analysis (RCA)

Analyse de cause initiale (RCA)

IEC 62740:2015-02(en-fr)

IEC 62740

Edition 1.0 2015-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Root cause analysis (RCA)

Analyse de cause initiale (RCA)

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ROOT CAUSE ANALYSIS (RCA)

FOREWORD

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International Standard IEC 62740 has been prepared by IEC technical committee 56: Dependability.

The text of this standard is based on the following documents:

FDIS	Report on voting
56/1590/FDIS	56/1608/RVD

Full information on the voting for the approval of this standard 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.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site 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.

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.

INTRODUCTION

Root cause analysis (RCA) refers to any systematic process that identifies factors that contributed to a particular event of interest (focus event). RCA is performed with the understanding that events are addressed by understanding the root causes, rather than the immediately obvious symptoms. RCA aims to reveal root causes so that either the likelihood of them occurring, or their impact if they do occur, can be changed.

An important distinction to make is that RCA is used to analyse a focus event that has occurred and therefore analyses the past (a posteriori). However, knowledge of the root causes of past events can lead to actions that generate improvements in the future.

This International Standard is intended to reflect current good practices in the conduct of RCA. This standard is general in nature, so that it may give guidance across many industries and situations. There may be industry specific standards in existence that establish preferred methodologies for particular applications. If these standards are in harmony with this publication, the industry standards will generally be sufficient.

This standard is a generic standard and does not explicitly address safety or accident investigation although the methods described in this standard may be used for this purpose.

ROOT CAUSE ANALYSIS (RCA)

1 Scope

This International Standard describes the basic principles of root cause analysis (RCA) and specifies the steps that a process for RCA should include.

This standard identifies a number of attributes for RCA techniques which assist with the selection of an appropriate technique. It describes each RCA technique and its relative strengths and weaknesses.

RCA is used to analyse the root causes of focus events with both positive and negative outcomes, but it is most commonly used for the analysis of failures and incidents. Causes for such events can be varied in nature, including design processes and techniques, organizational characteristics, human aspects and external events. RCA can be used for investigating the causes of non-conformances in quality (and other) management systems as well as for failure analysis, for example in maintenance or equipment testing.

RCA is used to analyse focus events that have occurred, therefore this standard only covers a posteriori analyses. It is recognized that some of the RCA techniques with adaptation can be used proactively in the design and development of items and for causal analysis during risk assessment; however, this standard focuses on the analysis of events which have occurred.

The intent of this standard is to describe a process for performing RCA and to explain the techniques for identifying root causes. These techniques are not designed to assign responsibility or liability, which is outside the scope of this standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050 (all parts), *International Electrotechnical Vocabulary*