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This standard includes the English version of the European Standard.

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Obsahuje: EN 62673:2013, IEC 62673:2013

Methodology for communication network dependability assessment and assurance
(IEC 62673:2013)

Méthodologie pour l'évaluation et l'assurance de la sûreté de fonctionnement des réseaux de communication
(CEI 62673:2013)

Methodik zur Beurteilung und Sicherstellung der Zuverlässigkeit von Kommunikationsnetzen
(IEC 62673:2013)

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Foreword

The text of document 56/1507/FDIS, future edition 1 of IEC 62673, prepared by IEC/TC 56 "Dependability" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62673:2013.

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) 2014-04-23
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IEC 61078	NOTE	Harmonised as EN 61078.
IEC 62198	NOTE	Harmonised as EN 62198.
IEC 60812	NOTE	Harmonised as EN 60812.
IEC 60300-3-11	NOTE	Harmonised as EN 60300-3-11.
IEC 60300-3-1	NOTE	Harmonised as EN 60300-3-1.
IEC 61165	NOTE	Harmonised as EN 61165

Annex ZA
(normative)
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NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-191		International Electrotechnical Vocabulary (IEV) - Chapter 191: Dependability and quality of service	-	-
IEC 60300-3-15		Dependability management - Part 3-15: Application guide - Engineering of system dependability	EN 60300-3-15	
IEC 61907		Communication network dependability engineering	EN 61907	



IEC 62673

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



Methodology for communication network dependability assessment and assurance

Méthodologie pour l'évaluation et l'assurance de la sûreté de fonctionnement d'un réseau de communication





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Methodology for communication network dependability assessment and assurance

Méthodologie pour l'évaluation et l'assurance de la sûreté de fonctionnement d'un réseau de communication

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**METHODOLOGY FOR COMMUNICATION NETWORK
DEPENDABILITY ASSESSMENT AND ASSURANCE**
FOREWORD

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

FDIS	Report on voting
56/1507/FDIS	56/1514/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.

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INTRODUCTION

Communication network dependability is highly influenced by the design and implementation of the network service functions, which aim to achieve user satisfaction in service performance.

Network evolution, service growth and functional renewal in communications have long been challenges to the providers of network services, not just for the broad range of services now in existence, but also for those service-related activities experienced by the end-users.

To sustain viable business in network services, it is prudent for the communications industry to provide the

- needed network service functions,
- adequate network capacity and performance capability,
- security of service,
- quality of service, and
- dependability of service.

This International Standard addresses one of the most important issues concerning the assessment and delivery of dependability of service to ensure network service performance. It also addresses the network dependability assurance strategies and methodology applications for enhancing and sustaining network operation.

This International Standard describes a generic methodology for dependability assessment and assurance of communication networks. It also provides relevant assessment and assurance methods to support communication networks for dependability engineering application, such as those conforming to IEC 61907 and ITU-T ¹ Recommendations concerning dependability.

It presents an approach for network dependability analysis and evaluation that ensures dependable network design for effective implementation.

The objective of this standard is to achieve a cost-effective solution for realizing the network dependability performance and to assure the benefits from the network dependability of service operation.

¹ ITU-T: International Telecommunications Union – Telecommunications.

METHODOLOGY FOR COMMUNICATION NETWORK DEPENDABILITY ASSESSMENT AND ASSURANCE

1 Scope

This International Standard describes a generic methodology for dependability assessment and assurance of communication networks from a network life cycle perspective. It presents the network dependability assessment strategies and methodology for analysis of network topology, evaluation of dependability of service paths, and optimization of network configurations in order to achieve network dependability performance and dependability of service. It also addresses the network dependability assurance strategies and methodology for application of network health check, network outage control and test case management to enhance and sustain dependability performance in network service operation.

This standard is applicable to network service providers, network designers and developers, and network maintainers and operators for assurance of network dependability performance and assessment of dependability of service.

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