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Space systems - Risk management

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 17666:2004 sisaldab Euroopa standardi EN ISO 17666:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 17666:2004 consists of the English text of the European standard EN ISO 17666:2003.</p> <p>This document is endorsed on 23.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard defines, extending the requirements of ISO 14300-1, the principles and requirements for integrated risk management on a space project; it explains what is needed to implement a project-integrated risk management policy by any project actor, at any level (i.e. customer, first-level supplier, or lower-level suppliers).</p>	<p>Scope: This European Standard defines, extending the requirements of ISO 14300-1, the principles and requirements for integrated risk management on a space project; it explains what is needed to implement a project-integrated risk management policy by any project actor, at any level (i.e. customer, first-level supplier, or lower-level suppliers).</p>
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English version

Space systems

Risk management
(ISO 17666 : 2003)

Systèmes spatiaux – Management
des risques (ISO 17666 : 2003)

Raumfahrtssysteme – Risiko-
management (ISO 17666 : 2003)

This European Standard was approved by CEN on 2002-12-06.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

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CEN

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

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Contents

page

Foreword	3
1 Scope	4
2 Terms, definitions and abbreviated terms	4
2.1 Terms and definitions.....	4
2.2 Abbreviated terms	6
3 Principles of risk management	6
3.1 Risk management concept	6
3.2 Risk management process	6
3.3 Risk management implementation into a project.....	6
3.4 Risk management documentation	7
4 The risk management process	7
4.1 Overview of the risk management process.....	7
4.2 Risk management steps and tasks	8
5 Risk management implementation	13
5.1 General considerations	13
5.2 Responsibilities.....	13
5.3 Project life cycle considerations	14
5.4 Risk visibility and decision making	14
5.5 Documentation of risk management.....	14
6 Risk management requirements	15
6.1 General.....	15
6.2 Risk management process requirements	15
6.3 Risk management implementation requirements.....	17
Annex A (informative) Risk register example and ranked risk log example	18
Bibliography	21

Figures

Figure 1 — The steps and cycles in the risk management process	7
Figure 2 — The tasks associated with the steps of the risk management process within the risk management cycle	8
Figure 3 — Example of a severity-of-consequence scoring scheme	9
Figure 4 — Example of a likelihood scoring scheme	9
Figure 5 — Example of risk index and magnitude scheme	10
Figure 6 — Example of risk magnitude designations and proposed actions for individual risks	10
Figure 7 — Example of a risk trend	13

Foreword

This document (EN ISO 17666:2003) has been prepared by the European Cooperation for Space Standardization (ECSS) for CEN in close collaboration with Technical Committee ISO/TC 20 "Aircraft and space vehicles".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2003, and conflicting national standards shall be withdrawn at the latest by September 2003.

Annex A is informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

Risks are a threat to the project success because they have negative effects on the project cost, schedule and technical performance, but appropriate practices of controlling risks can also present new opportunities with positive impact.

The objective of project risk management is to identify, assess, reduce, accept, and control space project risks in a systematic, proactive, comprehensive, and cost-effective manner, taking into account the project's technical and programmatic constraints. Risk is considered tradable against the conventional known project resources within the management, programmatic (e.g. cost, schedule), and technical (e.g. mass, power, dependability, safety) domains. The overall risk management in a project is an iterative process throughout the project life cycle, with iterations being determined by the project progress through the different project phases, and by changes to a given project baseline influencing project resources.

Risk management is implemented at each level of the customer-supplier network.

Known project practices for dealing with project risks, such as system and engineering analyses, analyses of safety, critical items, dependability, critical path, and cost, are an integral part of project risk management. Ranking of risks according to their criticality for the project success, allowing management attention to be directed to the essential issues, is a major objective of risk management.

The project actors agree on the extent of the risk management to be implemented into a given project depending on the project definition and characterisation.

1 Scope

This European Standard defines, extending the requirements of ISO 14300-1, the principles and requirements for integrated risk management on a space project; it explains what is needed to implement a project-integrated risk management policy by any project actor, at any level (i.e. customer, first-level supplier, or lower-level suppliers).

This European Standard contains a summary of the general risk management process, which is subdivided into four (4) basic steps and nine (9) tasks. The implementation can be tailored to project-specific conditions.

The risk management process requires information exchange among all project domains and provides visibility over risks, with a ranking according to their criticality for the project; these risks are monitored and controlled according to the rules defined for the domains to which they belong.

The fields of application of this standard are all the space project phases. A definition of project phasing is given in ISO 14300-1.

When viewed from the perspective of a specific programme or project context, the requirements defined in this European Standard should be tailored to match the genuine requirements of a particular profile and circumstances of a programme or project.

NOTE Tailoring is a process by which individual requirements or specifications, standards, and related documents are evaluated and made applicable to a specific programme or project by selection, and in some exceptional cases, modification and addition of requirements in the standards.

2 Terms, definitions and abbreviated terms

2.1 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

2.1.1

acceptance of (risk)

decision to cope with consequences, should a risk scenario materialise

NOTE 1 A risk can be accepted when its magnitude is less than a given threshold, defined in the risk management policy.

NOTE 2 In the context of risk management, acceptance can mean that even though a risk is not eliminated, its existence and magnitude are acknowledged and tolerated.

2.1.2

(risk) communication

all information and data necessary for risk management addressed to a decision maker and to relevant actors within the project hierarchy

2.1.3

(risk) index

score used to measure the magnitude of the risk; it is a combination of the likelihood of occurrence and the severity of consequence, where scores are used to measure likelihood and severity