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## Reservdelsförsörjning

*Spare parts provisioning*

Som svensk standard gäller europastandarden EN 62550:2017. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62550:2017.

### Nationellt förord

Europastandarden EN 62550:2017

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62550, First edition, 2017 - Spare parts provisioning**

utarbetad inom International Electrotechnical Commission, IEC.

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ICS 03.120.01; 21.020.00

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EUROPEAN STANDARD

**EN 62550**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2017

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English Version

## Spare parts provisioning (IEC 62550:2017)

Approvisionnement en pièces de rechange  
(IEC 62550:2017)

Ersatzteilbeschaffung  
(IEC 62550:2017)

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

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## **European foreword**

The text of document 56/1711/FDIS, future edition 1 of IEC 62550, prepared by IEC/TC 56 "Dependability" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62550:2017.

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) 2017-11-24
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-02-24

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## **Endorsement notice**

The text of the International Standard IEC 62550:2017 was approved by CENELEC as a European Standard without any modification.

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 60300-3-3:2004	NOTE	Harmonized as EN 60300-3-3:2004 (not modified).
IEC 61649	NOTE	Harmonized as EN 61649.
IEC 61709	NOTE	Harmonized as EN 61709.
IEC 62308	NOTE	Harmonized as EN 62308.
IEC 62402	NOTE	Harmonized as EN 62402.
IEC 62506	NOTE	Harmonized as EN 62506.

## CONTENTS

FOREWORD.....	5
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references .....	8
3 Terms, definitions and abbreviated terms .....	8
3.1 Terms and definitions.....	8
3.2 Abbreviated terms.....	11
4 Overview .....	12
4.1 Participants and major steps in the spare parts provisioning process .....	12
4.2 Types of spare parts .....	14
4.3 Identification of spare parts as integral part of the level of repair analysis (LORA) .....	14
4.4 Overall spare parts provisioning process.....	16
5 Demand forecast .....	17
5.1 General.....	17
5.2 Forecast based on consumption data.....	18
5.2.1 General .....	18
5.2.2 Procedures for forecast .....	18
5.3 Initial determination of demand .....	19
5.3.1 General .....	19
5.3.2 Prediction of failure rates and failure intensities.....	19
5.3.3 Calculation of demand rates .....	20
6 Spare parts quantification.....	20
6.1 General.....	20
6.1.1 Process overview .....	20
6.1.2 Probability distributions for spare parts quantification .....	22
6.1.3 Measures of effectiveness (MoE).....	23
6.1.4 ABC-analysis (Pareto analysis).....	24
6.1.5 Quantification of repairable items .....	26
6.1.6 Quantification of non-repairable items .....	26
6.2 Strategic (critical, insurance) spare parts .....	28
6.3 Inventory systems.....	28
6.4 Inventory optimization.....	30
7 Spare parts documentation.....	32
7.1 Principles and objectives .....	32
7.2 Illustrated parts catalogue (IPC).....	32
7.3 Parts catalogue.....	35
8 Supply management.....	35
8.1 General.....	35
8.1.1 Activities.....	35
8.1.2 Economic provisioning.....	36
8.2 Sources for spare parts.....	36
8.3 Supply policies.....	37
8.3.1 Insourcing.....	37
8.3.2 Outsourcing.....	37
8.3.3 Single sourcing.....	37

8.3.4	Global sourcing .....	38
8.3.5	Concurrent sourcing .....	38
8.3.6	Obsolescence management.....	39
8.4	Planning and control of the flow of repairable spare parts .....	39
Annex A (informative)	Prognosis of demand.....	40
A.1	General.....	40
A.2	Synthetic determining of demand .....	40
A.3	Prognosis based on consumption data .....	41
A.3.1	Overview .....	41
A.3.2	Forecast on the basis of the moving average .....	41
A.3.3	Forecast on the basis of the weighted moving average .....	42
A.3.4	Forecast on the basis of exponential smoothing.....	42
A.3.5	Forecast on the basis of regression analysis .....	43
Annex B (informative)	Measures of effectiveness .....	44
B.1	General.....	44
B.2	Stock-related measures of effectiveness .....	44
B.2.1	Fill rate (FR) and risk of shortage (ROS).....	44
B.2.2	Expected backorders (EBO).....	46
B.2.3	Mean waiting time (MWT) .....	47
B.3	System-related measures of effectiveness .....	48
B.3.1	Operational system availability ( $A_{Op}$ ) .....	48
B.3.2	Number of systems not operationally ready (NOR).....	49
Annex C (informative)	Example: Quantification of spare parts and optimization of inventory stocks.....	50
C.1	General.....	50
C.2	Product breakdown structure .....	50
C.3	Calculation of spare parts quantities and costs .....	52
Bibliography	.....	54
Figure 1	– Participants and major steps in the spare parts provisioning process .....	13
Figure 2	– Identification of spare parts .....	16
Figure 3	– Spare parts provisioning process during design and development.....	17
Figure 4	– Spare parts provisioning process during utilization .....	21
Figure 5	– Principle of an ABC-analysis .....	25
Figure 6	– Inventory control policies .....	27
Figure 7	– Hierarchically structured inventory system .....	28
Figure 8	– Single-product-single-inventory models.....	30
Figure 9	– Idealized inventory model for non-repairable items.....	31
Figure 10	– Supply management activities .....	36
Figure A.1	– Procedures of demand forecast .....	40
Figure B.1	– Diagram for the determination of the fill rate (FR) with a Poisson demand .....	45
Figure B.2	– Diagram for the determination of the factor $K$ for the required fill rate .....	46
Figure B.3	– Inventory system with a backorder case.....	46
Figure B.4	– Diagram for the determination of the mean waiting time (MWT) with a Poisson demand .....	48
Figure C.1	– Structure of the DCN .....	50

Figure C.2 – Inventory system for the DCN ..... 53

Table 1 – Responsibilities, targets, and measurements for suppliers, maintainers,  
operator and users..... 13

Table C.1 – First indenture level – Data communication network..... 51

Table C.2 – Second indenture level – Communication system..... 51

Table C.3 – Third indenture level – Power supply system ..... 51

Table C.4 – Third indenture level – Main processor ..... 51

Table C.5 – Third indenture level – Fan system ..... 52

Table C.6 – Investments in spare repairable items ..... 52

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## SPARE PARTS PROVISIONING

## FOREWORD

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International Standard IEC 62550 has been prepared by IEC technical committee 56: Dependability.

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

FDIS	Report on voting
56/1711/FDIS	56/1719/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 website 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.

## INTRODUCTION

Spare parts provisioning is the process for planning necessary spare parts under consideration of a customer's needs and requirements.

Proper planning and control of spare parts is a critical component of effective supportability. If the right parts are not available when needed for routine maintenance or repairs, downtime is prolonged. If too many spare parts are available, the enterprise absorbs excessive costs and the overhead of carrying inventory.

Spare part planning and supply to achieve business objectives are based on four goals:

- the right spare part;
- in the right quantity;
- at the right time;
- at the right place.

Spare parts provisioning is a prerequisite for all types of maintenance tasks, such as replacements and repairs. Spare parts for corrective maintenance tasks should be supplied at random intervals for steady state availability. It may take three to four repairs before steady state availability is reached. In this period repairs may be clustered, and the need can vary significantly over time. For preventive and on-condition maintenance, fixed intervals or approximately fixed intervals for replacement items may occur. Coordination of demand for spare parts with supply of spare parts at the required time is an important factor. Unavailable materials are one of the most cited reasons for delays in the completion of maintenance tasks.

The availability of spare parts is one of the factors that impacts system downtime. Methodologies such as integrated logistic support (ILS) and its subsidiary logistic support analysis (LSA) provide necessary information for spare parts provisioning. This information includes system breakdown, maintenance concept, and supply concept. Spare part optimization will cover issues typically giving answers to questions such as:

- which spare parts should be stored within the maintenance organization or by a supplier?
- how many spare parts of each type should be stocked?

Spare part optimization is based on operations research methods and selected reliability methods and may be analytical or use Monte Carlo simulations. The optimization process aims at balancing the cost of holding spare parts against the probability and cost of spare part shortage.

Before spare parts can be ordered, procedures for procurement, administration and storage of required material should be specified. Additionally, a general supply concept should be compiled and specified.

Correct material supply procedures will guarantee that spare parts are ordered in time and delivered when requested. The procedures also include control of the repair of replacement parts as well as the monitoring of repair turn-around times. All organizations involved, from production to purchasing and storage, via maintenance, should have complete transparency about material availability and possible completion of the task. The planned material costs in the task should be compared with its consumption. These are then documented and form the basis of usage-controlled materials planning. With this process, inventory of spare parts can be optimized to meet availability requirements with minimum inventory levels.

This document is applicable to all industries where supportability has a major impact on the dependability of the item through its life cycle.

## **SPARE PARTS PROVISIONING**

### **1 Scope**

This document describes requirements for spare parts provisioning as a part of supportability activities that affect dependability performance so that continuity of operation of products, equipment and systems for their intended application can be sustained.

This document is intended for use by a wide range of suppliers, maintenance support organizations and users and can be applied to all items.

### **2 Normative references**

There are no normative references in this document.