SLOVENSKI STANDARD
oSIST prEN 15221-5:2019

01-januar-2019

Upravljanje objektov in storitev - 5. del: Navodilo za procese upravljanja objektov in storitev

Facility Management - Part 5: Guidance on Facility Management processes

Facility Management - Teil 5: Leitfaden für Facility Management Prozesse

Facility management - Partie 5 : Guide relatif au développement et à l'amélioration des processus

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Ta slovenski standard je istoveten z: **prEN 15221-5**

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ICS:

03.080.10	Vzdrževalne storitve. Upravljanje objektov	Maintenance services. Facilities management
91.040.01	Stavbe na splošno	Buildings in general

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2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

Facility Management - Part 5: Guidance on Facility Management processes

Facility management - Partie 5 : Guide relatif au développement et à l'amélioration des processus

Facility Management - Teil 5: Leitfaden für Facility Management Prozesse

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 348.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 15221-5:2018) has been prepared by Technical Committee CEN/TC 348 "Facility Management", the secretariat of which is held by NEN.

This document is currently submitted to the CEN Enquiry.

This European Standard is one of the series ISO 41000 and EN 15221 "*Facility Management*" which consists of the following parts:

1. *ISO 41011*:*2017* Facility Management - Vocabulary
2. *ISO 41012*:Facility Management – Guidance on strategic sourcing and the development of agreements
3. *ISO*/TR *41013* Facility Management – scope, key concepts and benefits
4. *EN 15221* Part 3: Guidance on quality in Facility Management
5. *EN 15221* Part 4: Taxonomy, Classification and Structures in Facility Management
6. *EN 15221* Part 5: Guidance on Facility Management processes
7. *EN 15221* Part 6: Area and Space measurement in Facility Management
8. *EN 15221* Part 7: Performance Benchmarking

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Note With the addition of the ISO standards, Part 1 and Part 2 of *EN 15221* are withdrawn.

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Introduction

In 2013 the initiative was taken to interest parties at ISO level for the FM suite of standards of Europe, the EN 15221 parts 1 to 7. This resulted in the re-development of the standards for vocabulary, sourcing and agreements.

The result consists of the parts:

- ISO 41011 Facility Management – Vocabulary
- ISO 41012 Facility Management – Guidance on strategic sourcing and the development of agreements.
- ISO/TR 41013 Facility Management – Scope. Key concepts and benefits.

These standards also build on widely accepted management principles, in particular value chain (Porter, M E, (1985), "Competitive Advantage: creating and sustaining superior performance", Free Press, New York) and quality control (PDCA (Plan, Do, Check, Act). Deming, W E (1986), "Out of the Crisis", MIT, Cambridge). Reference to ISO 10014:2006, *Quality management – Guidelines for realizing financial and economic benefits*.

The principles of the Deming cycle (PDCA) underpin all of the standards but are applied to a different extent and depth in each. In fact there are different types of PDCA cycles depending of the term (e.g. long term, short-term).

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These standards align to EN ISO 9000 family of standards for Quality Management Systems and applies specific guidance on the concepts and use of a process-based approach to management systems to the field of Facility Management.

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The term "facility services" is used as a generic description in the standards. The term "standardized facility products" refers to the "standardized facility services" defined and described in EN 15221-4, *Facility Management – Part 4: Taxonomy, Classification and Structures in Facility Management*.

Countries can decide to substitute the term "product" into "service", when they consider that it is important for a good acceptance and use of the standards in their own country.

The aim of all the standards is to provide guidance to Facility Management (FM) organizations on the development and improvement of their FM processes to support the primary activities. This will support organizational development, innovation and improvement and will form a foundation for the further professional development of FM and its advancement in Europe. Therefore, generic examples are provided in the standard to assist organizations.

These standards lay the foundation of the work that has to be done further more in developing Facility Management, for e.g. benchmark standards prEN 15221-7

The aim of the standard is to provide guidance to all stakeholders concerned by Facility Management (FM), especially providers and their clients on the development and improvement of their processes to support the primary activities. This will support organisational development, innovation and improvement and will form a foundation for the further professional development of FM and its advancement in Europe.

Facility Management is defined in ISO 41011, *Facility Management – Vocabulary, and* ISO/TR 41013 *Facility Management – Scope, key concepts and benefits* as the "integration of processes within an organisation to maintain and develop the agreed services which support and improve the effectiveness of primary activities". Underlying this definition is a process-based, management systems approach, as defined in the EN ISO 9000 series.

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Further development of European Standards in Facility Management, based on ISO 41011 an 41013 will rely therefore on a better understanding of the processes involved and the mechanisms for their integration. These processes need to be identified and described, mapped and modelled to produce a framework for Facility Management.

This standard lays the foundations of further work in developing Facility Management standards and further develops the processes involved in creating FM agreements as described within ISO 41012 and 41013. The guidance provided in this standard established the need for the FM processes to start with analysing and having a clear picture of the client organization and its primary processes as a basis for the development of the FM strategy. All major decisions along the route to final specification of service levels and qualities, choice of delivery model and eventually preparation of the appropriate form of procurement and agreements flow from this basis.

This standard has been developed as one of four new standards and adopted an agreed set of principles, underlying the Facility Management approach, to ensure consistency. These are incorporated in the basic principles of a process-based management system upon which this standard is founded.

The standard aligns to EN ISO 9000 family of standards for Quality Management Systems and applies specific guidance on the concepts and use of a process-based approach to management systems to the field of Facility Management. The standard also builds on widely accepted management principles, in particular value chain (Porter, 1985) and quality control (Deming, 1986) which underlie process-based management systems.

The process approach, described in this document, should be widely applicable across the European member countries. In order to do this they must build from the existing model in the previous standard (ISO 41011 and 41013), be generic, and should not be too prescriptive and enable companies and organisations to adapt them to their own processes.

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Through applying the standard, organisations should be able to understand the importance of facility management processes to their effectiveness and understand the need to assess the maturity of their existing processes. This will provide a basis for developing and improving the facilities management processes through a consistent, process-based management approach. Generic examples are provided in the standard to assist organisations.

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Facility management processes are integrated at three organisational levels - operational, tactical and strategic. Agreements about the outcomes of these processes need also to be made at these three levels: operational agreements with end-users, tactical agreement with business units and strategic agreement with the senior management group (board, managing directors).

References:

Porter, M E, (1985), “Competitive Advantage: creating and sustaining superior performance”,

Free Press, New York;

Deming, W E (1986), “Out of the Crisis”, MIT, Cambridge.

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1 Scope

This document provides guidance to FM organisations on the development and improvement of their processes to support the primary processes.

This document also sets out basic principles, describes high-level generic FM processes, lists strategic, tactical and operational processes and provides examples of process workflows.

The document is written from a primary processes, demand perspective for an audience of all stakeholders in FM processes.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 41011, *Facility Management – Vocabulary*

EN 15221-3, *Facility Management - Part 3: Guidance on quality in Facility Management*

EN 15221-4, *Facility Management - Part 4: Taxonomy, Classification and Structures in Facility Management*

3 Terms and definitions

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For the purposes of this document, the terms and definitions given in ISO 41011 and the following apply.

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

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1
activities
tasks that are needed to complete deliverables

3.2
client
organisation that procures facility services by means of a Facility Management agreement

Note 1 to entry: The client acts on a strategic level and has a general and/or key function in all stages of the relationship with the service provider. The customer specifies the facility services.

[ISO 41011 and ISO/TR 41013]

3.3
customer
organisational unit that specifies and orders the delivery of facility services within the terms and conditions of a Facility Management agreement

Note 1 to entry: The customer acts on a tactical level.

[ISO 41010 and ISO 41012]

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3.4
end user
person receiving facility services

Note 1 to entry: A visitor could also be an end user.

[ISO 41011]

3.5
facility
tangible asset that supports an organisation

[ISO 41011]

3.6
facility management
integration of processes within an organisation to maintain and develop the agreed services which support and improve the effectiveness of its primary activities

[ISO 41011]

3.7
facility management service provider
organisation that provides the client with a cohesive range of facility services within the terms and conditions of a Facility Management agreement

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Note 1 to entry: A Facility Management service provider can be internal or external to the client.

[ISO 41011]

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3.8
facility service
support provision to the primary activities of an organisation, delivered by an internal or external provider

Note 1 to entry: Facility services are services related to Space and Infrastructure and to People and Organization.

[ISO 41011]

3.9
key performance indicator (KPI)
measure that provides essential information about the performance of facility services delivery

[ISO 41011]

3.10
primary activities
activities that constitute the distinctive and indispensable competencies of an organisation in its value chain

Note 1 to entry: The distinction between the primary activities and support services is decided by each organization individually; this distinction has to be continuously updated.

[ISO 41011]

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3.11
primary processes
processes, identified by an organisation, as essential to the provision of a service or product in its value chain, direct to its customers

[ISO 41011]

3.12
process
set of interrelated or interacting activities, which transforms inputs into outputs

[EN ISO 9000]

3.13
service level
complete description of requirements of a product, process or system with their characteristics

Note The described set of characteristics in the service level can be graded within boundaries suitable for measurement and analysis.

[ISO 41011 and ISO 41012]

3.14
service level agreement (SLA)
agreement between the client or customer and the service provider on performance, measurement and conditions of services delivery

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Note 1 to entry: A Facility Management agreement consists of general clauses, applicable to the whole agreement, and SLA specific clauses, only applicable to a facility service. In a Facility Management agreement several SLAs are included.

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[ISO 41011 and ISO 41012]

3.15
sub process
discrete process operating within the bounds of another broader process

3.16
system
entity of interrelated processes, technologies or (business-) structures

4 Principles of Facility Management processes

4.1 General

This section summarizes a set of underlying principles that have been applied in developing the guidance on Facility Management processes and have been used consistently in the ISO 41010 and the EN 15221 series of standards.

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4.2 Summary

a) FM processes are triggered by changes on every level of the organization (requests for change by end-user, customers and clients). In addition, the outputs of processes may also trigger the starting of other processes. A process has a specific acknowledged starting point (with inputs) and a definite end point (outputs);

b) a process consists of inputs, process activities and creates outputs. The output could be a delivered facility service, a standardized facility product but for example also a negotiated contract, a completed invoice or a final decision (which then may be an input for another process). The outcome of a process is the satisfaction of requirements;

c) a process is a set of activities which plan, prepare, do, evaluate, check and report the process;

d) these activities are carried out in execution of identified responsibilities;

e) a process is described as the workflow of the activities carried out, checking the quality, supervision of the process (including the response to defaults), and evaluation of the quality of the outputs;

f) FM processes are linked to the demand of the organization;

g) demands may arise at the strategic, tactical and operational level;

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h) these demands that are identified are transformed into FM requirements;

i) inputs into the FM processes are tangible assets, resources, data/information and conditions;

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j) outputs from FM processes are facilities, decisions, proposals, data/information and results;

k) FM processes influence the effectiveness of the primary processes;

l) FM processes can be triggered by changes on every level of the organization (requests for change by end users, customers and clients).It might be helpful to use the PDCA Cycle for controlling and managing quality;

m) processes should be continuously improved.

4.3 Basic principles

The description of basic principles in this section of the standard connects a variety of different aspects like general management concepts and principles with the content and construction of processes in Facility Management. It will indicate the different levels, it will also show the interfaces between single processes and introduces the systematic application of process thinking in this field.

Consistent with ISO 41011 and ISO/TR 41013, the process approach in this standard is derived from the ISO Guidance on the Concept and Use of the Process Approach for management systems applied specifically to the field of Facilities Management.

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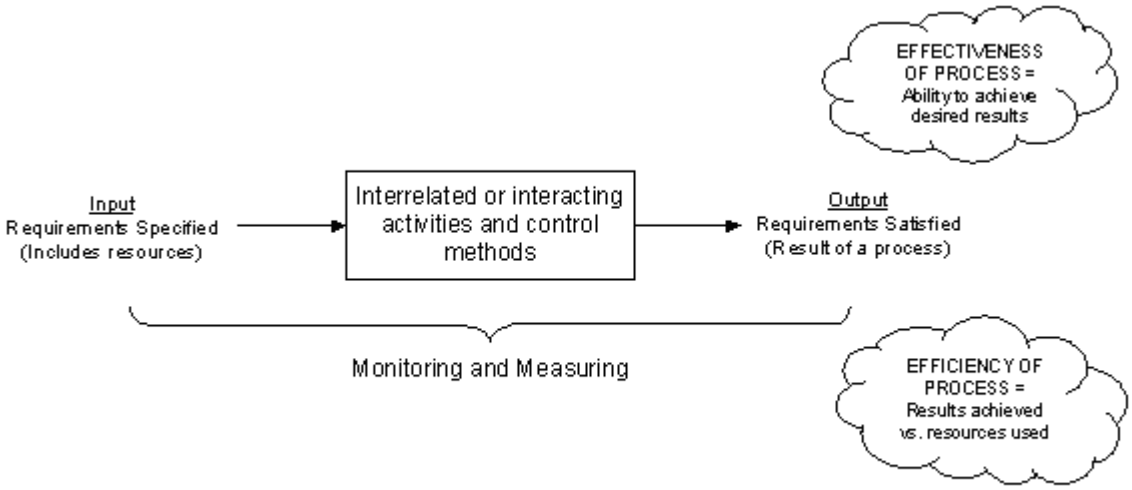

Figure 1 — Generic process

A key principle in this guidance refers to the output of processes as the satisfaction of the demands of the primary processes.

Guidance on how to define, achieve and measure quality in facility management is found in EN 15221-3. The classification of process inputs and outputs is to be found in EN 15221-4.

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The user of the standard will be guided from a detailed level (4.5 Structure of FM processes) to a general overview of processes (in Clause 5) and get an indication of relations and influences of the processes in Facility Management. Although many other aspects would also show important aspects, this section has the aim to provide a useful depth and broadness of the basic principles.

The relevance of the single processes varies according to the context of the organization (and its primary processes) in which these processes are applied. An industrial environment, for instance, may place an emphasis on operations and maintenance processes, in contrast to an administrative environment, although both might happen in the same organization. In the same way, the status of an organization (expanding, stagnating and shrinking) will impact on processes, as cost reduction, reduction of usable space or maintenance strategies. Therefore, it is crucial to stress that the principles of processes should be seen in the context of the overall processes of an organization. They are considered within the relationship between the organization and Facility Management and are shown, in the standard, as embedded in the FM Scope, key concepts and benefits of ISO/TR 41013

4.4 Facility management processes

4.4.1 General

The basis of the standardization of processes is the FM-scope of ISO/TR 41013 on one hand, and the classification of facility products on the other (EN 15221-4). The FM scope defines and describes demands of primary processes and supply by internal workforce or external providers. Connectivity and coordination is required at 3 levels – the strategic, tactical and operational level.

Processes are sets of activities, with a specific order of these activities (workflow), a starting point and end points and clearly defined inputs and required outputs. Processes have to be set up for the specific circumstances and requirements of an organization.

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4.4.2 Standardized facility products

EN 15221-4 sets up a new approach to the structure of facility services by forming a defined set of hierarchically structured facility services called standardized facility products.

The classification identifies a product in a hierarchy. For a given organization or a given provider respectively facility products should be classified according to the standard. There is no necessity to demand or supply the complete range of products.

The classification structure covers all 3 levels. The “facility product” on the strategic level is called FM strategic integration and contains the integration of all purchased and used or consumed facility products of an organization. It is considered as integration and not just a bundle of facility products.

At the tactical level, space and infrastructure and the integration for people and organization are integrated.

At the operational level, there are standardized products. The classification is just an identification code; there is no standardization in terms of internal quality or quantity of the facility product for both, the provider and the purchasing and using or consuming organization.

4.5 Structure of FM Processes

4.5.1 General

According to EN ISO 9001:2008, processes consist of inputs, the workflow and outputs. In guidance on the concept and use of the process approach for management systems the outputs, as a result of the processes, are considered as satisfied requirements.

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4.5.2 Process structure

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The starting points in describing a process are the required inputs. When these inputs are available and the required conditions and triggers are in place and the planning and preparation is fulfilled, the workflow starts. The output is created at the end of the workflow. In Facility Management, these inputs are tangible assets (equipment, desks, buildings, etc.), resources (manpower, energy, space and data/information) as well as certain conditions (status of operation, cleanliness etc.), which trigger different processes or sub-processes.

The workflow of an FM process consists of a logical sequence of activities linked to various elements (capacities, competences), triggers (initiating pulses, conditions, results of other processes), events, data, workflow structures and sub-processes. In order to achieve the outputs effectively, the workflow has to incorporate responses to faults, failures and interruptions. When executed, a process has a defined status and may trigger other processes.

The whole process and workflows, for the use of the inputs and achievement of requirements, needs to be managed effectively and efficiently. The FM processes, managed by workflows, produce outputs which are measurable FM products.

4.5.3 Process inputs

Looking at the various inputs, it is evident that certain processes contain different facilities, on which the process will be carried out.

In Facility Management, these inputs are, for example, tangible assets (equipment, desks, buildings, etc.), resources (manpower, energy, space and data/information) as well as certain conditions (status of operation, cleanliness etc.), which trigger different processes or sub-processes.

Basic examples are shown in Clause 5 to give an indication of the process inputs. As an example, the technical equipment of a building is the input for the operations and maintenance processes, the data and even results of former maintenance activities add more inputs to the maintenance process. The required resources are the necessary manpower, the handling materials, which are needed and the