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Management de l'innovation - Partie 1. Système de management de l'innovation				
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Management de l'innovation - Partie 1: Système de management de l'innovation Innovationsmanagement - Teil 1: Innovationsmanagementsystem

This Technical Specification (CEN/TS) was approved by CEN on 21 April 2013 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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

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Foreword

This document (CEN/TS 16555-1:2013) has been prepared by Technical Committee CEN/TC 389 "Innovation management", the secretariat of which is held by AENOR.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document is not intended for the purpose of certification.

CEN/TS 16555 will consist of the following parts under the general title Innovation management:

- Part 1: Innovation management system.
- Part 2: Strategic intelligence management.
- Part 3: Innovation thinking.
- Part 4: Intellectual property management.
- Part 5: Collaboration management.
- Part 6: Creativity management. TANDARD PREVIEW
- Part 7: Innovation management assessment ds.iteh.ai)

Parts 2 to 7 are in preparation.

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According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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Introduction

Innovation is a key driver for the success of organizations. The aim of this Technical Specification is to guide organizations to introduce, develop, and maintain a framework for systematic innovation management practices, an Innovation Management System (IMS). Establishing such a management system would allow organizations to become more innovative and to achieve more success with their product, service, process, organizational design and business model innovations. This would foster organisation's results, value and competitiveness.

Implementing an innovation management system provides several benefits to an organisation, for example, it:

- enhances growth, revenues and profit from innovations;
- brings fresh thinking and new value to the organisation;
- proactively captures value from better understanding of future market needs and possibilities;
- helps identify and mitigate risks;
- taps into the collective creativity and intelligence of the organisation;
- captures value from the collaboration with partners for innovation;
- motivates employee involvement in the organisation and fosters teamwork and collaboration.

An innovation management system includes all activities that are required for generating innovations on a continuous basis, regardless of the organisation's size and it builds, amongst others, on the following:

- context of the organisation; <u>SIST-TS CEN/TS 16555-1:2014</u> https://standards.iteh.ai/catalog/standards/sist/630f6191-8fl e-4597-ad54-
- leadership for innovation and strategy, 6e0e90834/sist-ts-cen-ts-16555-1-2014
- planning for innovation success;
- innovation enablers/driving factors;
- innovation management process;
- assessment of the performance of the IMS;
- improvement of the IMS;
- innovation management techniques.

Figure 1 provides a conceptual overview of the innovation management system that is outlined in this Technical Specification.



Figure 1 — Key elements covered by this innovation management system

The innovation management system can be a stand-alone one or can be integrated into the core operations and management of the organisation to ensure innovation objectives are delivered and performance is measured and improved.

During the development of this Technical Specification, particular attention has been given to the needs of small and medium-sized enterprises.

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1 Scope

This Technical Specification provides guidance on establishing and maintaining an innovation management system (IMS). It is applicable to all public and private organizations regardless of sector, type or size.

This document provides guidance on:

- understanding the context of the organisation;
- establishing the leadership and commitment of top management;
- planning for innovation success;
- identifying and fostering innovation enablers/driving factors;
- developing the innovation management process;
- evaluating and improving the performance of the IMS;
- understanding and using innovation management techniques.

By using this document, organizations can increase their awareness of the value of an IMS, establish such a system, expand their capacity for innovation, and ultimately generate more value for the organisation and its interested parties.

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NOTE The innovation management system outlined in this document follows the PDCA structure (plan-do-checkact), so that it can be integrated within other standardized business management systems existing in organizations, e.g. EN ISO 9001, EN ISO 14001, etc.

2 Normative references

<u>SIST-TS CEN/TS 16555-12014</u> standards.iteh.ai/catalog/standards/sist/630f6191-8f1e-4597-ad54-8e16e0e90834/sist-ts-cen-ts-16555-1-2014

Not applicable.

3 Terms and definitions

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

3.1

innovation

implementation of a new or significantly improved product (good or service), or process, new marketing method, or new organizational method in business practices, workplace organization or external relations

3.2

innovation management system (IMS)

set of interrelated or interacting elements of an organization to establish innovation policies and objectives as well as processes to achieve those objectives

4 Context of the organisation

4.1 Understanding the organisation and its context

The organisation should determine external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended outcomes of its IMS. The organisation should determine the boundaries and applicability of the IMS to establish its scope.

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The organisation should regularly scan and analyse the external environment, to identify present and future challenges. This external analysis should consider aspects such as:

- market aspects (user needs, competitors, partners, suppliers, etc.);
- technical aspects (intellectual property, standards, science development, etc.);
- political aspects (legislation, regulations, interaction with public administration, etc.);
- economic aspects (macro-economic situation, funding and tax reduction opportunities, etc.);
- social aspects (demographics, diversity, trends, impact of sustainability, etc.).

The organisation should regularly analyse its current and future capabilities regarding innovation management. This internal analysis should consider aspects such as:

- existing management practices and use of other management system standards;
- cultural aspects such as attitudes and commitment towards innovation at various levels of the organisation; performance of internal collaboration;
- capability aspects such as existing and needed competencies, facilities, equipment and investment capabilities (related to innovation);
- operational aspects such as business models, processes, products and services, including sustainability considerations;
- performance aspects such as achievements and failures over the recent past.

NOTE Strategic intelligence is useful for the purpose of this clause (see 11.2). https://standards.iteh.ai/catabo/standards/sist/630(619)-8f1e-4597-ad54-

4.2 Understanding the needs and expectations of interested parties

The organisation should determine the interested parties that are relevant to the IMS, and identify their needs, expectations and requirements.

Interested parties are divided into those external to the organisation (e.g. partners, suppliers, distributors, research organizations, customers and users, public authorities, etc.) and those within it (e.g. employees, top management, departments, shareholders, etc.).

Interested parties need to be involved and consulted to identify their needs and expectations which may be explicit or implicit. In particular, it is important for the organisation to understand the needs of customers as well as users and their unmet and unarticulated needs.

NOTE Strategic intelligence and innovation thinking are useful for the purpose of this clause (see 11.2 and 11.3).

5 Leadership for innovation

5.1 Innovation vision and strategy development

Top management should establish an innovation vision, which is a statement about what the organisation wants to achieve in terms of innovation. The vision should:

- set a direction and a challenge that can inspire persons to commit and work towards;
- be sufficiently ambitious and not constrained by the organisation's current capabilities;

— provide a target against which progress can be measured.

The vision should be deployed through an innovation strategy which is the general plan to achieve this vision. The strategy should take into account the results of the analysis of the external and internal context (see 4.1) and the identified needs and expectations of external and internal interested parties (see 4.2). It can be better developed following consultation with these interested parties and should be communicated to them. The innovation strategy should define:

- the organisation's innovation capacity and resources;
- what innovation means for the organisation and for each area or unit; define criteria that distinguishes innovation from the daily business;
- what kinds of innovation should be focussed on (e.g. product, service, process, organisation and/or business model innovation);
- the levels of novelty that should be focussed on (e.g. incremental, radical, and/or disruptive);
- policy on human resources enabling innovation (see 7.7);
- policy on intangible assets and intellectual property (see 7.8);
- policy on collaboration, including sourcing ideas from outside the organisation and collaboration with third parties (see 7.9).

The innovation vision, strategy and policies should be available as documented information, be measured, communicated within the organisation and available to interested parties, as appropriate.

5.2 Leadership and top management commitment

Top management should demonstrate leadership and commitment with respect to the IMS by:

- ensuring that innovation vision, strategy, policies and objectives are established for the IMS and are compatible with the strategic direction of the organisation (see 5.1);
- fostering a culture that supports innovation (see 5.3);
- ensuring the integration of the IMS recommendations into the organisation's business processes;
- ensuring that the resources (human and financial) needed for the IMS are available;
- communicating the importance, throughout the organisation, of effective innovation management and of conforming to the IMS;
- ensuring that the IMS achieves its intended outcomes;
- directing and supporting persons to contribute to the effectiveness of the IMS;
- promoting continual improvement of the IMS;
- supporting other relevant management roles in their capacity to contribute to the IMS.

5.3 Fostering an innovation culture

Top management should foster a culture that supports innovation. Innovation culture should be understood as a mindset, and each person within the organisation is responsible for contributing to its growth. A culture that supports innovation can be promoted by top management through:

- Idea support: Allow time for and incentivize the development of new ideas. Create a constructive and
 positive work environment that encourages the presentation of ideas. Develop recognition and/or
 incentives systems for successful ideas. Teach the organisation members how to share and promote their
 own ideas.
- Communication: Support open and frank exchange of ideas and solutions amongst employees.
- Openness and collaboration encouragement: Cooperation across different internal and external stakeholders is essential for innovation. An innovation friendly organisation encourages collaboration builds mutual respect and provides means for communication.
- Conflict consciousness: Some level of conflict fosters debate and creativity and is essential to the innovation process. It should be actively managed as a potential source of innovation.
- Failure tolerance: The organisation should accept that innovation comes with some uncertainty and thereby also some risks. An innovation friendly organisation focuses on the learning aspect of failure and is cautious about negative sanctions.

5.4Organizational roles, responsibilities and authorities

Top management should ensure that the responsibilities and authorities for relevant roles are assigned and communicated within the organisation (see 7.1).

Top management should assign the responsibility and authority for:

- ensuring that the IMS conforms to the recommendations of this Technical Specification, and
- reporting on the performance of the IMS back to top management.
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6.1 Risks and opportunities

When planning for the IMS, the organisation should consider the external and internal issues referred to in 4.1, the needs and expectations in 4.2 and the innovation vision and strategy in 5.1, and determine the risks and opportunities that need to be addressed to:

- ensure the IMS can achieve its intended outcomes;
- prevent, or reduce, undesired effects;
- achieve continual improvement.

The organisation should plan actions to address these risks and opportunities, and how to integrate and implement the actions into its IMS processes, and evaluate the effectiveness of these actions.

In all innovation activities, risk and uncertainty shall be considered.

6.2 Operational planning

The organisation should establish innovation objectives at relevant functions and levels. The innovation objectives should be consistent with the innovation vision and strategy (see 5.1), communicated, be measurable if practicable, be monitored, and updated as appropriate.

The organisation should retain documented information on the innovation objectives.