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**Innovation management — Tools and
methods for intellectual property
management — Guidance**

*Management de l'innovation — Outils et méthodes de management
de la propriété intellectuelle — Recommandations*



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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 IP management Framework	1
4.1 Understanding the organization and its context	1
4.2 Establishing systematic IP management	2
4.3 IP management responsibility	2
4.3.1 Leadership and commitment	2
4.3.2 Organizational roles and responsibilities	2
4.4 Culture	3
4.4.1 Awareness	3
4.4.2 Work environment	4
4.5 Human capital	4
4.5.1 People	4
4.5.2 Knowledge and competence	4
4.5.3 Education and training	5
4.6 Financial considerations	5
4.7 Legal considerations	5
5 IP Strategy	6
5.1 IP strategy goals	7
5.2 Developing IP strategy	8
5.3 Implementing IP strategy	9
6 IP management in the innovation process	10
6.1 General	10
6.2 IP management in the "identify opportunities" process	11
6.2.1 Why	11
6.2.2 Input	11
6.2.3 How	12
6.2.4 Output	12
6.3 IP management in the "create concepts" process	12
6.3.1 Why	12
6.3.2 Input	12
6.3.3 How	13
6.3.4 Output	13
6.4 IP management in the " validate concepts " process	13
6.4.1 Why	13
6.4.2 Input	14
6.4.3 How	14
6.4.4 Output	14
6.5 IP management in the " develop solutions " process	14
6.5.1 Why	14
6.5.2 Input	15
6.5.3 How	15
6.5.4 Output	15
6.6 IP management in the " deploy solutions" process	15
6.6.1 Why	16
6.6.2 Input	16
6.6.3 How	16
6.6.4 Output	16
Annex A (informative) Tools and methods for invention record and disclosure	17

Annex B (informative) Tools and methods for IP generation, acquisition and maintenance	21
Annex C (informative) Tools and methods for IP search	25
Annex D (informative) Tools and methods for IPR evaluation	27
Annex E (informative) Tools and methods for IP risk management	29
Annex F (informative) Tools and methods for IP exploitation	32
Bibliography	35

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 279, *Innovation Management*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

0.1 General

Every organization involved with innovation initiatives addresses intellectual property in one form or another, because intellectual property is inextricably linked with innovation. Intellectual property ("IP") refers to unique, value-adding creations of the human intellect that result from human ingenuity, creativity and inventiveness. IP is a type of property while intellectual property rights ("IPR") are the rights arising from different forms of IP.

IP enables the granting of property-like rights over new knowledge and creative expressions. For example, IP relates to scientific or technological products or processes, software, data, know-how literary and artistic works, designs, symbols and names. There are various types of IPRs that protect different innovation outputs.

IP is becoming increasingly important on a global scale in today's knowledge-based economy. IP is no longer important just for large organizations, it is also important for smaller organizations because it allows all organizations to capture the benefits of innovation. A consideration of third-party IP is also relevant in order to ensure that organizations can leverage the outcome of their innovative efforts. It is important to engage in IP management activities across the organization and amongst organizations. For example, IP can facilitate ideas being co-developed, exchanged and traded.

An organization can leverage IP to achieve its business objectives and to implement innovation initiatives for a range of purposes including:

- strategic positioning,
- finding routes to innovation,
- protecting innovation results,
- attracting and securing investment,
- increasing competitive advantage,
- establishing clear ownership of IP and IPR,
- establishing freedom to operate,
- creating innovation value,
- enabling collaboration.

IP strategy should be an integral part of the wider business and innovation strategies. Organizations should be aware that considering IP only from a defensive perspective can obscure some benefits that IP can achieve which can support additional innovation and business objectives. This is because effective IP management enables an organization to optimize its IP assets to achieve a wide range of organizational objectives. This also allows for maximizing the benefits associated with innovation, while managing uncertainty and minimizing related risks and costs. IP management can enable collaboration with partners, competitors, and customers, which can yield enhanced innovation outcomes. IP management can create collective value through collaborative approaches (e.g. open-innovation, joint-development, ecosystems, and network effects), and be a driver of additional sources of revenue (e.g. cash flows through licensing).

Effective innovation management should include implementing an IP strategy which is aligned with the business strategy. There are several activities associated with an IP strategy (illustrated in the outer circle of [Figure 1](#)) and the implementation of these aspects results in positive outcomes (illustrated in the inner circle of [Figure 1](#)).

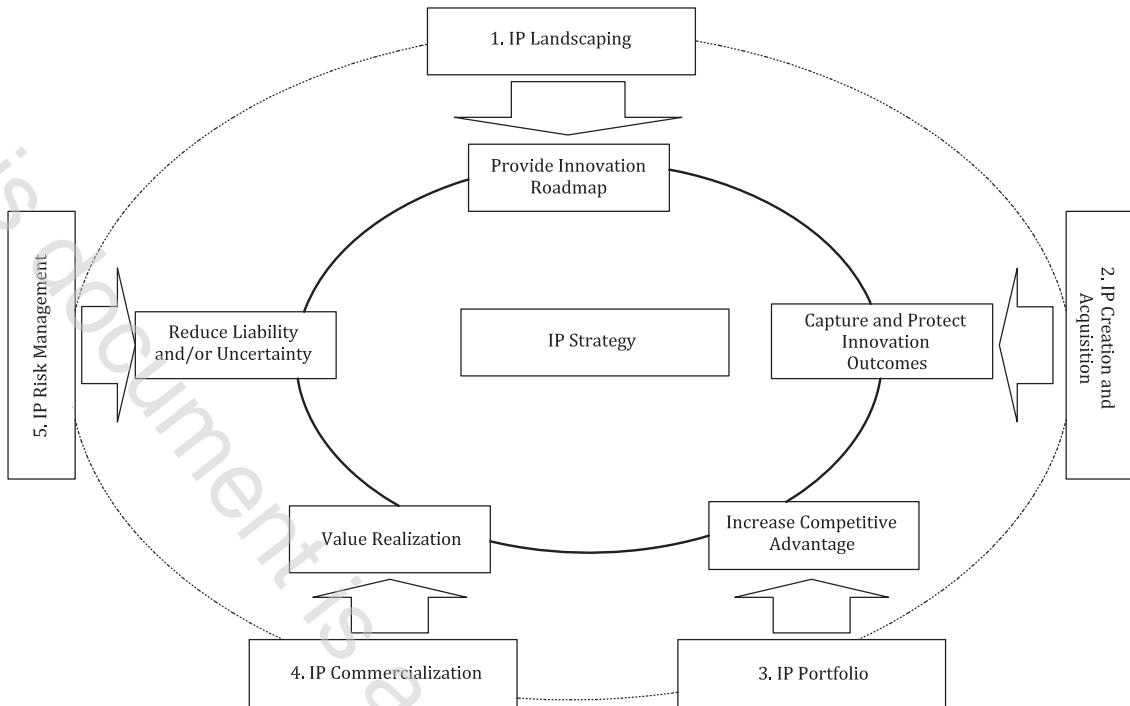


Figure 1 — IP management activities which contribute to innovation management

There is no universally appropriate IP strategy, since an IP strategy should be tailored to the needs of an organization's business and innovation strategies. IP strategy is diverse depending on the context of the organization, such as external and internal issues, including the maturity of the organization's innovation management.

Therefore, the IP strategy should be flexible enough to adapt and change over time. In other words, the depth and breadth of an IP strategy should be adaptable to the changing context of the organization over time.

0.2 Principles

The following principles, derived from the innovation management system provide a foundation for IP management:

a) Realization of value

The management of IP should create value for all relevant stakeholders. This includes long-term and short-term value; explicit and implicit value; financial and non-financial value.

b) Future-focused leaders

At the outset of an innovation initiative, leaders across the organization should inspire and engage employees, and other interested parties, to generate, protect and leverage IP with a view to long-term value creation for the organization.

c) Strategic direction

The organization should align the overall strategic direction for the management of IP with its business and innovation strategies.

d) Culture

The organization should foster and sustain shared values, beliefs, and behaviours across the organization with a view to generating, protecting and leveraging IP for long-term value creation for the organization.

e) Exploiting insights

The organization should access a diverse range of internal and external IP knowledge sources to systematically develop the organization's IP expertise and to support its innovation planning and strategy.

f) Managing uncertainty

The organization should evaluate and manage innovation uncertainty and risks from an IP perspective, with regard to the management of internal IP and awareness of external IP.

g) Adaptability

The organization should adopt relevant systematic IP management processes in a timely manner to address changes in organizational context, and to ensure continued alignment with its desired purpose and core capabilities.

h) Systems approach

The organization should manage IP based on a systems approach (instead of on an ad-hoc basis) with a view to reducing organizational risks and enhancing value creation potential for the organization.

0.3 Structure of the document

The management of IP is necessary for effective innovation management. It provides a means for the organization to obtain and maintain a dynamic core capability and to transform its innovation results into valuable IP assets.

The organization should consider the following:

- An IP management framework, aimed at the implementation of IP management activities ([Clause 4](#));
- An IP strategy as an integral part of the organization's business and innovation strategies ([Clause 5](#));
- IP management activities tailored to the innovation process, especially taking account of the changing context in different innovation stages ([Clause 6](#), linked to ISO 56002:2019, Clause 8);
- IP tools used in support of IP management activities ([Annex A](#) to [Annex F](#)).

[Figure 2](#) presents the structure of IP management with references to the clauses of this document.

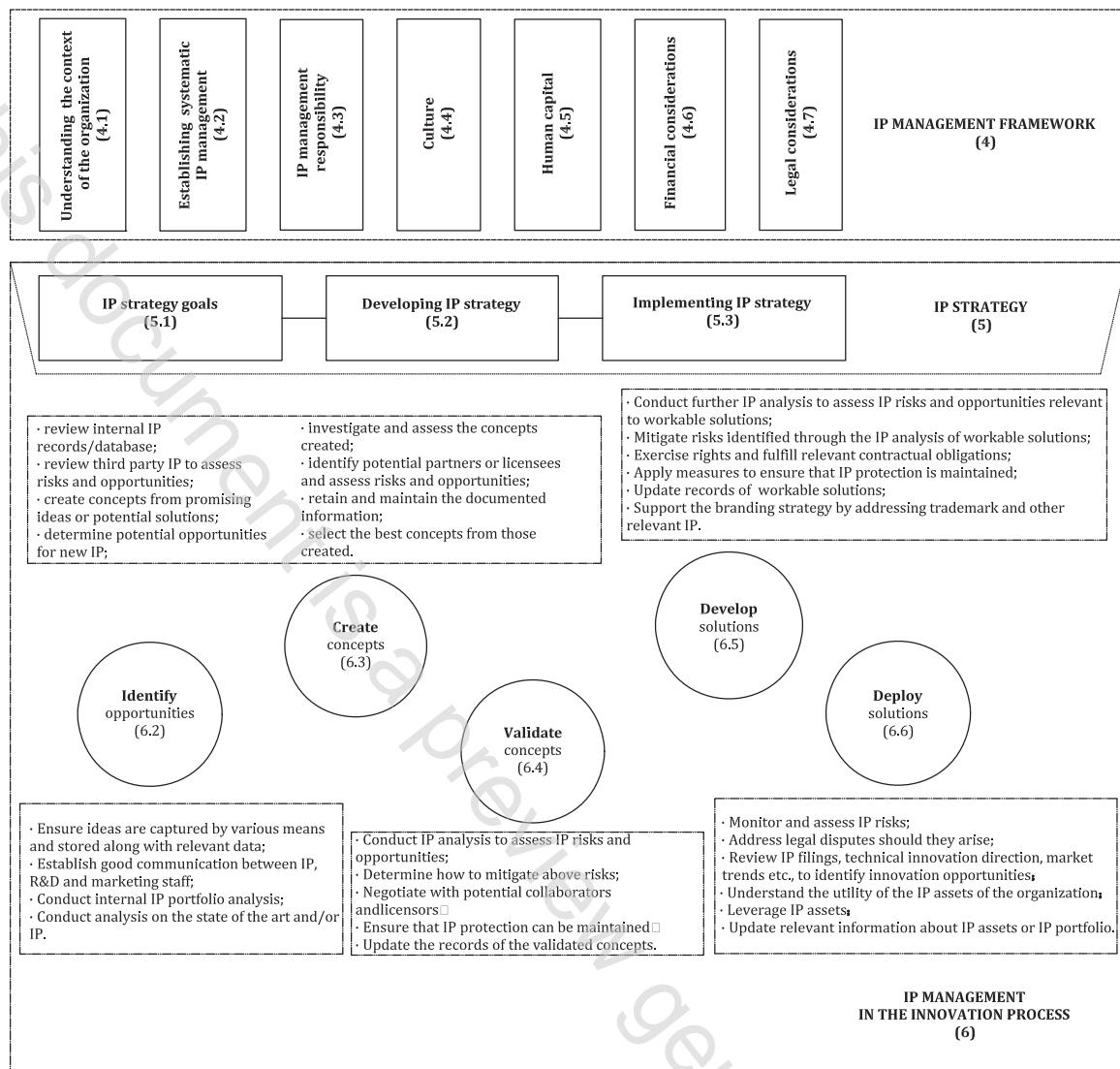


Figure 2 — Structure of IP management with reference to the clauses of this document

This document relates to the ISO 56000 family of standards, developed by TC 279, as follows:

- ISO 56000:2020 Innovation management system — Fundamentals and vocabulary provides the essential background for the understanding and implementation of this document.
- ISO 56002:2019 Innovation management system — Guidance provides guidance for the development, implementation and maintenance of an innovation management system, to which all subsequent standards of the family, are complementary to.
- ISO 56003:2019 Innovation management — Tools and methods for innovation partnerships - Guidance provides guidance and tools to select external partnerships to enhance innovation success.
- ISO/TR 56004:2019 Innovation management assessment – Guidance provides guidance for organizations to plan, implement and follow-up on an innovation management assessment.

Innovation management — Tools and methods for intellectual property management — Guidance

1 Scope

Efficient management of IP is key to support the process of innovation, is essential for organizations' growth and protection, and is their engine for competitiveness.

This document proposes guidelines for supporting the role of IP within innovation management. It aims to address the following issues concerning IP management at strategic and operational levels:

- Creating an IP strategy to support innovation in an organization;
- Establishing systematic IP management within the innovation processes;
- Applying consistent IP tools and methods in support of efficient IP management.

This document can be used for any type of innovation activities and initiatives.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 56000: 2020 apply.

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

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

4 IP management Framework

4.1 Understanding the organization and its context

The organization should determine external and internal issues and considerations that are relevant to its organizational objectives and that affect its ability to achieve its intended IP strategic objectives.

The organization should:

- a) scan and analyze the external environment, considering issues related to the following: a) areas such as market, culture, technology, legal, regulatory and political aspects; b) geographic scope: whether international, national or regional; c) time horizons - short, medium, or long term; d) potential opportunities and threats, such as opportunities through collaborators or threats from competitors;
- b) analyze its internal environment in terms of business and innovation strategies and types of IP assets of the organization, while considering issues related to: a) the business and innovation vision, strategic direction, existing management practices; b) the business and innovation objectives and planning to achieve them; c) existing IP owned by the organization or licensed to or from others; d) process and resource strengths and weaknesses that can impact achievement of intended IP