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**Sustainable development in  
communities — Management system  
for sustainable development —  
Requirements with guidance for use**

*Développement durable des communautés — Système de  
management pour le développement durable — Exigences et lignes  
directrices pour son utilisation*





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## 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](http://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](http://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 on 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 the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is Technical Committee ISO/TC 268, *Sustainable development in communities*.

## Introduction

This International Standard adopts a holistic approach to the establishment of the requirements of a management system for sustainable development in communities, including cities, and provides guidance aimed at:

- improving the contribution of communities to sustainable development;
- fostering smartness and resilience in communities, while taking into account the territorial boundaries to which it applies;
- assessing the performance of communities in progressing towards sustainable development.

It sets out to establish a coherent framework to enable the community to develop its purposes and vision.

This International Standard sets out requirements and guidance to help communities achieve a framework that will allow them to become more sustainable. It does not set benchmarks or expected levels of performance.

While the challenge of sustainable development is global, the strategies for achieving it at community level are local, to a large extent, and can therefore differ in context and content from country to country and region to region. Community strategies need to reflect the context, preconditions, priorities and needs, particularly in the social environment, e.g. social equity, cultural identity and traditions, heritage, human health, safety and comfort, and social infrastructure.

In order to become more sustainable, communities also face the challenge of respecting planetary boundaries and taking into account the limitations these boundaries impose.

**NOTE 1** The concept of “planetary boundaries” describes a framework within which humanity needs to live in order to continue to develop and thrive for generations to come. Climate change, freshwater consumption, land-use change and loss of biodiversity are examples of planetary boundaries. Crossing these boundaries could generate abrupt or irreversible environmental changes, while respecting them significantly reduces risks. Planetary boundaries can be broken down in order to select measures that can be addressed at community level, while taking into account the specific situation.

The management of sustainable development in communities encompasses a wide range of issues, e.g. issues related to the economic, social and natural environment of communities and their interactions. Those issues can have strategic, operational and competitive implications.

**NOTE 2** The capacity to foster cross-discipline harmony and common purpose is fundamental to achieving a community’s objectives effectively and efficiently.

This International Standard is designed to empower communities and to build on local initiatives. It targets environmental, social and economic issues, including improved community services and socio-economic benefits, as well as supporting clear purposes for sustainable development in communities and encouraging sound planning systems to achieve them.

This International Standard focuses on communities as stepping stones towards sustainability of society as a whole. Although each community has values and interests of its own, all communities can derive mutual benefits from agreeing upon ownership of shared values and objectives without exonerating individual actors from their respective responsibilities. This can be achieved only if the community applies a long-term view on planning, while respecting the Earth’s overall capacity and the needs of current and future generations, including the capability and resources to provide resilience.

This International Standard fosters the establishment of a multi-actor process in communities, through a holistic approach that facilitates the cooperation of all interested parties and avoids a silo approach. It is intended to provide guidance for organizations that implement other management systems that are compatible with this International Standard, such as ISO 14001, ISO 45001, ISO 50001, ISO 20121, ISO 14046 and ISO 26000, whether involved directly or indirectly in sustainable development in communities at different stages in their life cycles.

Involvement of interested parties through a multi-actor process can take different forms, such as:

- participatory partnerships;
- public participation;
- community based collaboration.

They all aim at involving interested parties in a cooperative dialogue for more sustainable solutions.

The successful implementation of this International Standard can help communities elaborate holistic and integrated strategies for sustainable development that depart from usual business approaches. It can also help communities show interested parties that an appropriate management system is in place and encourage them to become proactive.

Successful implementation of this International Standard can:

- help to build consensus on sustainable development within communities;
- improve the sustainability, smartness and resilience of strategies, programmes, projects, plans and services conducted under the direct responsibility of communities, or on the territory they relate to;
- evolve cross-sector, multidisciplinary, life cycle value and total costing approaches;
- foster synergies between several actors through a holistic approach;
- increase the efficiency and attractiveness of communities.

The successful implementation of this International Standard is intended to establish a coherent framework to enable communities to develop their purpose and vision. Using relevant indicators and metrics, the outcome of strategies, programmes, projects, plans and services can be measured throughout communities. Metrics and indicators are connected, but often developed for different reasons. Metrics have a more technical focus, e.g. a parameter of the performance of a product, a process or an infrastructure element.

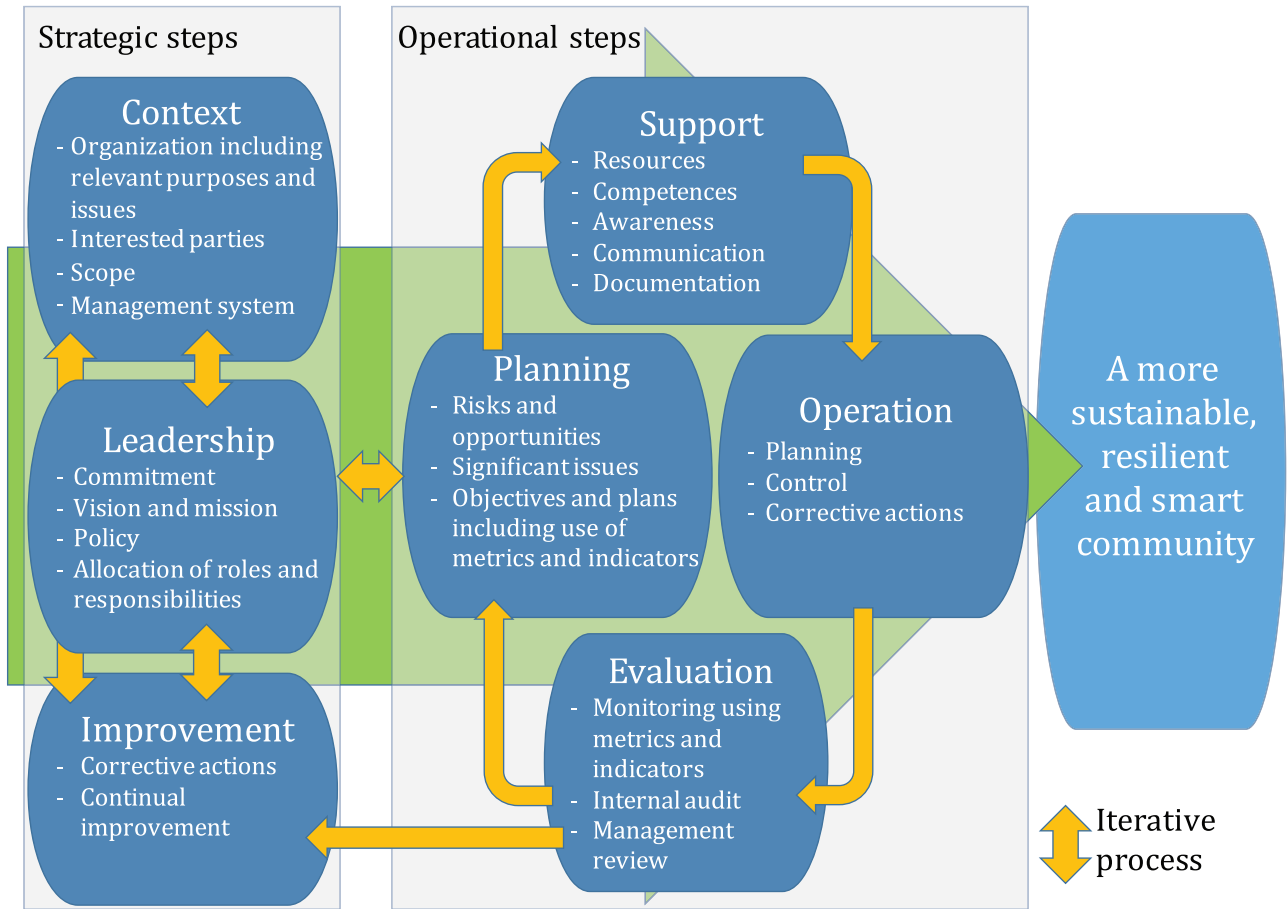
The International Standards developed by ISO/TC 268 aim to make use of indicators and metrics for structured and consistent support of sustainable, smart and resilient management of communities. Indicators such as those used in ISO 37120 are quantitative, qualitative or descriptive measures defined for actual use in monitoring and evaluating the overall performance of a community. In contrast, metrics such as those used in ISO/TS 37151 are the measurement method and measurement scale defined for use in evaluating the technical performance of infrastructure elements (hardware and software), e.g. in energy, transport or waste management services.

[Annex B](#) provides a mapping of issues, indicators and metrics between this International Standard, ISO 37120:2014 and ISO/TS 37151:2015

This International Standard is based on the Plan-Do-Check-Act (PDCA) model, which can be briefly described as follows:

- Plan: establish objectives and processes necessary to deliver results in accordance with community purposes;
- Do: implement processes and achieve objectives;
- Check: monitor and measure processes against community policy, objectives and commitments, and report the results;
- Act: take necessary actions to improve performance.

[Figure 1](#) illustrates how this International Standard follows a PDCA approach to the management of sustainable development in communities.



NOTE Strategic steps are iterative, while operational steps are sequential. It is their combined implementation that helps communities become more sustainable, resilient and smart.

**Figure 1 — Relationship between PDCA model and this International Standard**

In this International Standard, the following verbal forms are used:

- “shall” indicates a requirement;
- “should” indicates a recommendation;
- “may” indicates a permission;
- “can” indicates a possibility or a capability.

Information marked as “NOTE” is intended to assist the understanding or use of the document. “Notes to entry” used in [Clause 3](#) provide additional information that supplements the terminological data and can contain provisions relating to the use of a term.



# Sustainable development in communities — Management system for sustainable development — Requirements with guidance for use

## 1 Scope

This International Standard establishes requirements for a management system for sustainable development in communities, including cities, using a holistic approach, with a view to ensuring consistency with the sustainable development policy of communities.

NOTE 1 Cities have become essential actors for sustainable development at local, national and international levels over the last century, due to the pressure of unprecedented urbanization.

The intended outcomes of a management system for sustainable development in communities include:

- managing sustainability and fostering smartness and resilience in communities, while taking into account the territorial boundaries to which it applies;
- improving the contribution of communities to sustainable development outcomes;
- assessing the performance of communities in progressing towards sustainable development outcomes and the level of smartness and of resilience that they have achieved;
- fulfilling compliance obligations.

NOTE 2 Smartness and resilience are embedded in the process of sustainable development: sustainable development is the overarching process, while smartness and resilience are characteristics.

This International Standard is intended to help communities become more resilient, smart and sustainable, through the implementation of strategies, programmes, projects, plans and services, and demonstrate and communicate their achievements.

This International Standard is intended to be implemented by an organization designated by a community to establish the organizational framework and to provide the resources necessary to support the management of environmental, economic and social performance outcomes. A community that chooses to establish the organizational framework by itself is considered to constitute an organization as defined in this International Standard.

This International Standard is applicable to communities of all sizes, structures and types, in developed or developing countries, at local, regional or national levels, and in defined urban or rural areas, at their respective level of responsibility.

This International Standard can be used in whole or in part to improve the management of sustainable development in communities. Claims of conformity to this International Standard, however, are not acceptable unless all its requirements are incorporated into an organization's management system for sustainable development in communities and fulfilled without exclusion.

## 2 Normative references

There are no normative references.

## 3 Terms and definitions

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

## 3.1 accountability

state of being answerable for decisions and activities to the *interested parties* (3.19) of an *organization* (3.27)

## 3.2 audit

systematic, independent and documented *process* (3.31) for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled

Note 1 to entry: An audit can be an internal audit (first party) or an external audit (second party or third party), and it can be a combined audit (combining two or more disciplines).

Note 2 to entry: An internal audit is conducted by the *organization* (3.27) itself, or by an external party on its behalf.

Note 3 to entry: “Audit evidence” and “audit criteria” are defined in ISO 19011.

## 3.3 city

urban *community* (3.4) falling under a specific administrative boundary

Note 1 to entry: A city is sometimes referred to as a municipality or a local government.

Note 2 to entry: Cities can help to alleviate increasing pressure on the environment and natural resources caused by global urbanization through the development of holistic and integrated *policies* (3.30).

[SOURCE: ISO 37120:2014, 3.1, modified — Definition has been modified and Notes 1 and 2 to entry have been added.]

## 3.4 community

group of people with an arrangement of responsibilities, activities and relationships

Note 1 to entry: In many, but not all, contexts, a community has a defined geographical boundary.

Note 2 to entry: A *city* (3.3) is a type of community.

[SOURCE: ISO/TS 37151:2015, 3.1, modified — Note 1 to entry has been modified and Note 2 to entry has been added.]

## 3.5 competence

ability to apply knowledge and skills to achieve intended results

## 3.6 compliance obligations (preferred term)

legal requirements and other requirements (admitted term)

legal *requirements* (3.32) that an *organization* (3.27) has to comply with and other requirements that an organization has to or chooses to comply with

Note 1 to entry: Compliance obligations are related to the *management system* (3.21) for *sustainable development* (3.36) in *communities* (3.4).

Note 2 to entry: Compliance obligations can arise from mandatory requirements, such as applicable laws and regulations, or voluntary commitments, such as organizational and industry standards, contractual relationships, principles of good governance and community and ethical standards.

## 3.7 conformity

fulfilment of a *requirement* (3.32)

**3.8****continual improvement**

recurring activity to enhance *performance* (3.29)

**3.9****corrective action**

action to eliminate the cause of a *nonconformity* (3.25) and to prevent recurrence

**3.10****documented information**

information required to be controlled and maintained by an *organization* (3.27) and the medium on which it is contained

Note 1 to entry: Documented information can be in any format and media, and from any source.

Note 2 to entry: Documented information can refer to:

- the *management system* (3.21), including related *processes* (3.31);
- information created in order for the organization to operate (documentation);
- evidence of results achieved (records).

**3.11****ecosystem**

system of complex interactions between plants, animals, microorganisms and their *environment* (3.14), which functions as a unit

[SOURCE: ISO 13065:2015, 3.14, modified]

**3.12****ecosystem services**

benefits provided by *ecosystems* (3.11) that contribute to the viability and quality of human life

[SOURCE: ISO 13065:2015, 3.15, modified]

**3.13****effectiveness**

extent to which planned activities are realized and planned results achieved

**3.14****environment**

surroundings in which an *organization* (3.27) operates, including air, water, land, natural resources, flora, fauna, humans and their interrelations

[SOURCE: ISO 13065:2015, 3.16]

**3.15****evaluation**

systematic *process* (3.31) of determining how well individuals, procedures, systems or programmes have met formally agreed *objectives* (3.26) and *requirements* (3.32)

[SOURCE: ISO 10795, 2011, 1.90]

**3.16****greenhouse gas emission**

total mass of a greenhouse gas released to the atmosphere over a specified period of time

[SOURCE: ISO 14064-1, 2006, 2.5]

**3.17**

**impact**

positive or negative change to society, economy or the *environment* (3.14), wholly or partially resulting from an *organization's* (3.27) past and present decisions and activities

[SOURCE: ISO 26000:2010, 2.9]

**3.18**

**indicator**

quantitative, qualitative or descriptive measure

[SOURCE: ISO 15392:2008, 3.14]

**3.19**

**interested party** (preferred term)

stakeholder (admitted term)

person or *organization* (3.27) that can affect, be affected by, or perceive itself to be affected by a decision or activity

**3.20**

**life cycle**

consecutive and interlinked stages of a product (or service) system, from raw material acquisition or generation from natural resources to final disposal

Note 1 to entry: The life cycle stages include acquisition of raw materials, design, production, transportation/delivery, use, end-of-life treatment and final disposal.

[SOURCE: ISO 14001:2015, 3.3.3]

**3.21**

**management system**

set of interrelated or interacting elements of an *organization* (3.27) to establish *policies* (3.30) and *objectives* (3.26) and *processes* (3.31) to achieve those objectives

Note 1 to entry: A management system can address a single discipline or several disciplines.

Note 2 to entry: The system elements include the organization's structure, roles and responsibilities, planning and operation.

Note 3 to entry: The scope of a management system may include the whole organization, specific and identified functions of the organization, specific and identified sections of the organization, or one or more functions across a group of organizations.

**3.22**

**measurement**

*process* (3.31) to determine a value

**3.23**

**metric**

defined *measurement* (3.22) method and measurement scale

[SOURCE: ISO/TR 37150:2014, 3.5, modified]

**3.24**

**monitoring**

determining the status of a system, a *process* (3.31) or an activity

Note 1 to entry: To determine the status, there may be a need to check, supervise or critically observe.

**3.25**

**nonconformity**

non-fulfilment of a *requirement* (3.32)

**3.26****objective**

result to be achieved

Note 1 to entry: An objective can be strategic, tactical, or operational.

Note 2 to entry: Objectives can relate to different disciplines (such as financial, health and safety, and environmental goals) and can apply at different levels [such as strategic, organization-wide, project, product and *process* (3.31)].

Note 3 to entry: An objective can be expressed in other ways, e.g. as an intended outcome, a purpose, an operational criterion, as an objective of *sustainable development* (3.36) in *communities* (3.4), or by the use of other words with similar meaning (e.g. aim, goal, or target)

Note 4 to entry: In the context of *management systems* (3.21) for sustainable development in communities, objectives for sustainable development in communities are set by the *organization* (3.27), consistent with the *policy* (3.30) for sustainable development in communities, to achieve specific results.

**3.27****organization**

person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* (3.26)

Note 1 to entry: The concept of organization includes, but is not limited to sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

Note 2 to entry: In this International Standard, the concept of organization refers to an entity/institution inside the *community* (3.4) that is tasked with implementing the *management system* (3.21), e.g. the local government. The community identifies an organization that it entrusts with the implementation of this International Standard.

**3.28****outsource** (verb)

make an arrangement where an external *organization* (3.27) performs part of an organization's function or *process* (3.31)

Note 1 to entry: An external organization is outside the scope of the *management system* (3.21), although the outsourced function or process is within the scope.

**3.29****performance**

measurable result

Note 1 to entry: Performance can relate either to quantitative or qualitative findings.

Note 2 to entry: Performance can relate to the management of activities, *processes* (3.31), products (including strategies, programmes, projects, plans and services), systems or *organizations* (3.27).

**3.30****policy**

intentions and direction of an *organization* (3.27), as formally expressed by its *top management* (3.37)

**3.31****process**

set of interrelated or interacting activities which transforms inputs into outputs

**3.32****requirement**

need or expectation that is stated, generally implied or obligatory

Note 1 to entry: "Generally implied" means that it is custom or common practice for the *organization* (3.27) and *interested parties* (3.19) that the need or expectation under consideration is implied.

Note 2 to entry: A specified requirement is one that is stated, for example in *documented information* (3.10).

### 3.33 resilience

adaptive capacity of an *organization* (3.27) in a complex and changing *environment* (3.14)

Note 1 to entry: The Intergovernmental Panel on Climate Change (IPCC)<sup>[21]</sup> defines resilience as “the ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions”.

Note 2 to entry: Resilience is the ability of an organization to resist being affected by an event or the ability to return to an acceptable level of *performance* (3.29) in an acceptable period of time after being affected by an event.

Note 3 to entry: Resilience is the capability of a system to maintain its functions and structure in the face of internal and external change and to degrade gracefully when this is necessary.

[SOURCE: ISO Guide 73:2009, 3.8.1.7, modified — Notes 1, 2 and 3 to entry have been added.]

### 3.34 risk

effect of uncertainty on *objectives* (3.26)

Note 1 to entry: An effect is a deviation from the expected — positive or negative.

Note 2 to entry: Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood.

Note 3 to entry: Risk is often characterized by reference to potential “events” (as defined in ISO Guide 73:2009, 3.5.1.3) and “consequence” (as defined in ISO Guide 73:2009, 3.6.1.3), or a combination of these.

Note 4 to entry: Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated “likelihood” (as defined in ISO Guide 73:2009, 3.6.1.1) of occurrence.

### 3.35 smartness

quality of contributing to *sustainable development* (3.36) and *resilience* (3.33), through soundly based decision making and the adoption of a long- and short-term perspective

Note 1 to entry: Smartness is embedded in the *process* (3.31) of sustainable development, i.e. sustainable development is the overarching process, while smartness is a characteristic. It implies a holistic approach, including good governance and adequate organization, processes and behaviour, and appropriate innovative use of techniques, technologies and natural resources.

Note 2 to entry: Smartness is addressed in terms of *performance* (3.29), relevant to technologically implementable solutions.

### 3.36 sustainable development

development that meets the environmental, social and economic needs of the present without compromising the ability of future generations to meet their own needs

Note 1 to entry: Derived from the Brundtland Report<sup>[22]</sup>.

Note 2 to entry: The Aalborg Charter<sup>[23]</sup> provides further information on *sustainable development* (3.36) in *communities* (3.4).

[SOURCE: ISO Guide 82:2014, modified — Note 2 to entry has been added.]

**3.37****top management**

person or group of people who directs and controls an *organization* (3.27) at the highest level

Note 1 to entry: Top management has the power to delegate authority and to provide resources within the organization.

Note 2 to entry: Top management is understood to be the decision-making body of the organization formally or informally entrusted by the relevant community to implement the *management system* (3.21).

Note 3 to entry: If the scope of the management system covers only part of an organization, then top management refers to those who direct and control that part of the organization.

**4 Context of the organization****4.1 Understanding the organization and its context**

When implementing this International Standard, the organization shall determine external and internal sustainability issues (see 4.6) that are relevant to its purpose (see 4.5) and that affect its ability to achieve the intended outcome(s) of its management system for sustainable development in communities, and shall involve interested parties at an early stage.

The organization shall ensure that the management system for sustainable development in communities:

- is designed to empower communities and build on local initiatives;
- targets social, environmental and economic issues;
- improves community services and socio-economic benefits;
- supports clear sustainable purposes and promotes sound planning systems to achieve them.

**4.2 Understanding the needs and expectations of interested parties**

The organization shall determine:

- the interested parties that are relevant to the management system for sustainable development in communities;
- the relevant requirements of these interested parties;
- which of these needs and expectations become its compliance obligations.

Appropriate involvement of interested parties is a key principle of sustainable development. There is no effective implementation without acceptance, understanding, will, interest, awareness and recognition of benefits and accountability, especially because limited organization responsibilities and financial resources create a need for appropriate partnerships.

**4.3 Determining the scope of the management system for sustainable development in communities**

The organization shall determine the boundaries and applicability of the management system for sustainable development in communities to establish its scope.

When determining this scope, the organization shall consider:

- the external and internal issues referred to in 4.1 and 4.6;
- the requirements referred to in 4.2.

The scope shall be available as documented information.



#### 4.4 Management system for sustainable development in communities

The organization shall establish, implement, maintain and continually improve a management system for sustainable development in communities, including the processes needed and their interactions, in accordance with the requirements of this International Standard. The organization shall secure sufficient resources to implement the management system at the appropriate level of authority.

The requirements of this International Standard are presented in sequential form. However, organizations may implement the clauses in this International Standard concurrently or consecutively to meet their specific needs.

Taking relevant purposes and issues into account, the management system shall encourage the implementation of harmonized, holistic and integrated approaches to sustainable development.

#### 4.5 Purposes of sustainability

The organization shall identify, review and document all the purposes and issues that contribute to implementing this International Standard.

The organization shall consider the purposes of sustainability outlined in [Table 1](#).

**Table 1 — Purposes of sustainability**

Purpose of sustainability	Examples
Attractiveness	Appeal to citizens and other interested parties, e.g. investors; belonging; culture; place; sense of identity.
Preservation and improvement of environment	Improved environmental performance, including reducing greenhouse gas emissions; protection, restoration and enhancement of biological diversity and ecosystem services, including protection of ecosystems, plant and animal diversity and migration as well as genetic diversity; reduced health hazard.
Resilience	Anticipation; climate change mitigation and/or adaptation; economic shocks and stresses preparedness, social evolution.
Responsible resource use	Consumption; distribution; improved land management; reducing, reusing and recycling of materials; respect for scarcity of all types of resources (natural, human, financial); sustainable production, storage and transport.
Social cohesion	Accessibility; culture; dialogue with external parties not limited by boundaries, diversity; equity; heritage; inclusiveness; inequalities reduction; rootedness; sense of belonging and social mobility.
Well-being	Access to opportunities; creativity, education; happiness; healthy environment; human capital improvement; liveable city; prosperity; quality of life; security; self-confidence; welfare.

The organization shall focus on the sustainability issues described in [4.6](#). It may, however, consider additional issues if relevant and suitable, bearing in mind that issues are likely to change or evolve over time.

#### 4.6 Sustainability issues

##### 4.6.1 General

When reviewing all strategies, programmes, projects, plans and services for inclusion in the organization strategic plan, the organization shall evaluate their contribution to achieve the six purposes of sustainability and how they take the sustainability issues into account. In order to do so, the organization shall undertake an iterative cross-analysis of purposes and issues.

When evaluating the contribution to achieve the six purposes of sustainability outlined in [4.5](#), taking into account the twelve sustainability issues described in [4.6.2](#) to [4.6.13](#), the organization shall consider the United Nations Sustainable Development Goals<sup>[24]</sup> (in particular Goal 11: “Make cities and human



settlements inclusive, safe, resilient and sustainable”), as well as their potential implementation in communities.

[Tables 2](#) to [13](#) provide guidance on the types of questions that the organization or interested parties may raise in the course of this cross-analysis.

NOTE The questions proposed in [Tables 2](#) to [13](#) might not be applicable in all cases and are provided as examples only.

All strategies, programmes, projects, plans and services carried out by the organization shall contribute to achieve the six purposes and take the issues into account.

If the organization needs to consider additional or alternative issues, it should answer the following questions, in order to identify those that are relevant and suitable.

- Is the issue of concern/importance to interested parties?
- Is the issue likely to make a major contribution to the sustainability of the community?
- Does the issue fall under the authority or in the sphere of influence of the community?
- Does the community have means to address the issue, e.g. through its strategies, programmes, projects, plans and services?
- Is addressing the issue technically possible?
- Is addressing the issue environmentally, socially and financially feasible?
- Is the human, financial and natural capital available to address the issue?
- Is addressing the issue measurable?

On the basis of the answers to the above questions, the significance of the issue may be evaluated and the level of influence of the community in regard to that issue ranked from greatest to least.

#### 4.6.2 Governance, empowerment and engagement

In order to achieve a more sustainable development, governance models need to foster systemic approaches to engaging all interested parties.

NOTE ISO 26000 provides further information on governance.

[Table 2](#) provides examples related to governance, empowerment and engagement.

**Table 2 — Examples related to governance, empowerment and engagement**

Purpose	Examples of questions related to issues
Attractiveness	To what extent are interested parties and investors involved and how are their contributions taken into account?
Preservation and improvement of environment	How are interested parties encouraged to be involved in preserving and enhancing the environmental quality and appearance?
Resilience	How does the governance structure in communities monitor, report and address resilience?
Responsible resource use	How does the governance in communities support responsible use of natural resources and reflects the concept of planetary boundaries?
Social cohesion	How does the governance system take into account issues related to social inclusion, equity and mobility in the development and implementation of policies in communities?
Well-being	How does the governance system monitor, report and act upon the quality of life, happiness or satisfaction of community members?

### 4.6.3 Education and capacity building

Education and capacity building at all levels raises awareness, knowledge and skills that contribute to sustainable development, smartness and resilience.

[Table 3](#) provides examples related to education and capacity building.

**Table 3 — Examples related to education and capacity building**

Purpose	Examples of questions related to issues
Attractiveness	How does the availability and quality of education for all ages contribute to the attractiveness of the community?
Preservation and improvement of environment	How does education foster interest and active engagement in environmental preservation and restoration?
Resilience	What educational strategies are implemented in the community to prepare members to face potential risks and help the community as a whole to become more robust?
Responsible resource use	What strategies are used to embed sustainability targeted approaches?
Social cohesion	How diverse is the community in terms of knowledge, skills and abilities? What benefits does this diversity bring to the community as a whole?
Well-being	What strategies are used in the community to raise awareness on the benefits of preserving common resources and engaging in activities that serve public interest?

### 4.6.4 Innovation, creativity and research

Innovation, creativity and research foster the development of new forms of cooperation and the elaboration of cutting-edge designs, while contributing to excessive risk aversion and giving due consideration to ethical implications and outcomes.

[Table 4](#) provides examples related to innovation, creativity and research.

**Table 4 — Examples related to innovation, creativity and research**

Purpose	Examples of questions related to issues
Attractiveness	How does encouragement and practical support for creativity, enquiry, research and innovation in the community contribute to its attractiveness?
Preservation and improvement of environment	What benefits does community-based innovation bring to environmental management?
Resilience	How does the community foster synergy between innovative programmes, projects and activities to enhance their contribution to the community's resilience?
Responsible resource use	How does the community use innovation, creativity and existing research capacity to encourage responsible use of natural resources?
Social cohesion	How does the community facilitate equal and open access to creative activities, opportunities for artistic and creative expression and community-based funding?
Well-being	How does the community evaluate the benefits of improving the quality of collective living spaces and preserving or introducing inspiring public spaces?

### 4.6.5 Health and care in the community

Healthcare plays a crucial role in maintaining and improving physical and mental health within the community and in contributing to its well-being and resilience.

[Table 5](#) provides examples related to health and care in the community.

**Table 5 — Examples related to health and care in the community**

Purpose	Examples of questions related to issues
Attractiveness	How does health service quality for all groups and ages impact the attractiveness of the community?
Preservation and improvement of environment	How do we measure the impact of the environment, especially water, air and soil quality, on health?
Resilience	How are practise health alerts and emergency preparedness exercises organized in the community?
Responsible resource use	How does the community promote the use of sound public health preventative practices?
Social cohesion	How do we encourage healthcare charities in the community? Where do they draw their resources and support from?
Well-being	How accessible, equitable and adequate is the system of in the community healthcare?

#### 4.6.6 Culture and community identity

Culture and community identity are essential to preserving lifestyles, including intangibles such as practices, know-how, languages, spirituality and customs, while allowing or even encouraging the evolution of heritage and traditions.

[Table 6](#) provides examples related to culture and community identity.

**Table 6 — Examples related to culture and community identity**

Purpose	Examples of questions related to issues
Attractiveness	To what extent do policies and strategies in a communities contribute to expanding, maintaining or eroding their sense of identity? How do the cultural policies in communities contribute to their attractiveness?
Preservation and improvement of environment	To what extent is the natural environment a source of inspiration for identity and values in communities?
Resilience	Are changes in culture and identity expected in communities? If so, why and when?
Responsible resource use	How is culture used to raise awareness on responsible resource use?
Social cohesion	How do you ensure greater accessibility and affordability to cultural events in communities?
Well-being	What opportunities do people in communities enjoy to develop a distinct sense of identity, individually or collectively?

#### 4.6.7 Living together, interdependence and mutuality

Living together, interdependence and mutuality entail the development of collective and collaborative lifestyles that produce mutual economic and social benefits in terms of inter and intra-generational equity and social mobility.

[Table 7](#) provides examples related to living together, interdependence and mutuality.

**Table 7 — Examples related to living together, interdependence and mutuality**

Purpose	Examples of questions related to issues
Attractiveness	How do social equity and inclusiveness contribute to enhance the attractiveness of communities?
Preservation and improvement of environment	How does the environment foster intergenerational, intercultural and social mix and mingle?
Resilience	How are the bonds in communities strengthened to ensure they are strong enough to respond to disasters or serious crises?

**Table 7 (continued)**

Purpose	Examples of questions related to issues
Responsible resource use	How do communities facilitate and foster barter and non-monetary transactions to promote more efficient resource use?
Social cohesion	What social ties do communities build between their various components, particularly between those who are marginalized, economically and culturally, and how does it do it?
Well-being	How do communities evaluate their urban development policy in terms of impact on quality of life, safety and on the health of its population?

**4.6.8 Economy and sustainable production and consumption**

Economy and sustainable production and consumption encompass the support to local production, consumption and exchange, economic diversity, employment and employability, bearing in mind that resource efficiency, life cycle approaches and transparency are key factors of sustainability.

[Table 8](#) provides examples related to economy and sustainable production and consumption.

**Table 8 — Examples related to economy and sustainable production and consumption**

Purpose	Examples of questions related to issues
Attractiveness	What policies have communities set up to attract investment, support start-ups and create and maintain a wide range of diverse employment opportunities? How successful are they?
Preservation and improvement of environment	Why have communities adopted an ethical food policy? Does it support local, organic and fair trade?
Resilience	How vulnerable are communities to external economic developments (e.g. higher prices for raw materials)?
Responsible resource use	What policies do communities follow to encourage local production and consumption? How successful are they or can they be?
Social cohesion	How do communities facilitate access to employment?
Well-being	How do communities encourage and support work life innovations?

**4.6.9 Living and working environment**

Addressing living and working environment entails facilitating and supporting the establishment of fair and equitable access to a quality of life and working conditions that match the needs and expectations of interested parties.

[Table 9](#) provides examples related to living and working environment.

**Table 9 — Examples related to living and working environment**

Purpose	Examples of questions related to issues
Attractiveness	What steps are communities taking to improve quality of life in order to increase their attractiveness?
Preservation and improvement of environment	To what extent are programmes, projects and activities in communities subject to regulations to limit their environmental impact? How do communities reduce greenhouse gas emissions?
Resilience	How do communities balance resilience, including adaptation to climate change, with creativity and quality of life?

Table 9 (continued)

Purpose	Examples of questions related to issues
Responsible resource use	To what extent are non-renewable resources used in a sustainable way?
Social cohesion	How do communities ensure equitable access to decent housing while limiting social segregation?
Well-being	To what extent are the benefits of higher quality living and working conditions on well-being evaluated?

#### 4.6.10 Safety and security

Dealing with safety and security aims at enforcing the right to privacy and the protection of public security, as well as the prevention and management of risk in communities.

[Table 10](#) provides examples related to safety and security.

Table 10 — Examples related to safety and security

Purpose	Examples of questions related to issues
Attractiveness	How safe are communities considered both internally by their members and externally by outsiders?
Preservation and improvement of environment	How do communities ensure the preservation or management of scarce and valued environmental resources?
Resilience	How is security and safety taken into account when planning land use?
Responsible resource use	How is responsible resource use taken into account when planning land use?
Social cohesion	How do communities improve safety and prevention of crime and violence for all, including their poorest members?
Well-being	What are the policies of communities to enhance safety and welcoming nature of public spaces?

#### 4.6.11 Community infrastructures

Community infrastructures, particularly smart infrastructures, can contribute to sustainability and resilience.

NOTE ISO/TR 37150 and ISO/TS 37151 provide detailed information on smart community infrastructure metrics.

[Table 11](#) provides examples related to community infrastructures.

Table 11 — Examples related to community infrastructures

Purpose	Examples of questions related to issues
Attractiveness	How does the capacity and quality of infrastructures available in communities contribute to their attractiveness?
Preservation and improvement of environment	How do communities reduce the environmental impact of their infrastructures and of their use?
Resilience	How is the resilience of infrastructures evaluated? How is the impact of the environment on the infrastructure assessed?
Responsible resource use	How do communities ensure efficient use of natural resources and energy in the operation of their infrastructures, e.g. by implementing smarter solutions?
Social cohesion	How do communities ensure that infrastructures provide the same level of service for everyone?
Well-being	To what extent do the services provided by community infrastructures satisfy everyone? How can they be improved, particularly by making them smarter?

#### 4.6.12 Mobility

Communities are expected to provide safe, comfortable, comprehensive, dependable, efficient, accessible, affordable and appropriate services for different age and special needs groups, in particular for persons with disabilities. They need to maintain a reliable transport system, improve connectivity, encourage non-motorized traffic (e.g. walking and bicycling) and facilitate the transport of goods.

NOTE In this subclause, mobility refers only to mobility services. Mobility infrastructures are covered in [4.6.11](#).

[Table 12](#) provides examples related to mobility.

**Table 12 — Examples related to mobility**

Purpose	Examples of questions related to issues
Attractiveness	How does investment in improved mobility show a return in terms of greater economic interaction, opening new contacts, diversifying local trade and contribute to the attractiveness of communities?
Preservation and improvement of environment	What steps are taken to reduce pollution (noise, air quality, greenhouse gas emissions throughout the associated life cycle) resulting from improved or increased mobility in communities?
Resilience	How is the resilience of mobility services evaluated? What plans and capabilities are in place to restore services in the event of a disaster or disruption?
Responsible resource use	How do communities develop and encourage sustainable mobility, e.g. by adopting a sustainable mobility policy?
Social cohesion	How does improved mobility bind communities together and increase shared experience?
Well-being	How do mobility conditions in communities enhance quality of life?

#### 4.6.13 Biodiversity and ecosystem services

The preservation and improvement of the local, regional and global environment, especially the protection, restoration and enhancement of biological diversity and ecosystem services, including fauna, flora and genetic diversity, is crucial to ensure safe and pleasant living conditions, and enhances the attractiveness of communities and strengthens their economic development.

[Table 13](#) provides examples related to biodiversity and ecosystem services.

**Table 13 — Examples related to biodiversity and ecosystem services**

Purpose	Examples of questions related to issues
Attractiveness	How have communities prioritized biodiversity's richness in their territory and made biodiversity protection a major focus of plans and projects?
Preservation and improvement of environment	What is the content of the biodiversity action plan to preserve and restore biodiversity and ecosystems of communities?
Resilience	How do communities assess the loss of biodiversity and respond to the related risks?
Responsible resource use	In what ways are biodiversity and ecosystem services considered as major natural resources and managed in a sustainable manner?
Social cohesion	How do communities facilitate access to nature and ecosystems?
Well-being	How have communities helped citizens to become aware that intact ecosystems and diversity of species contribute to quality of life?

## 5 Leadership

### 5.1 Leadership and commitment

Top management shall demonstrate leadership and commitment with respect to the management system for sustainable development in communities by:

- ensuring that the policy and objectives of sustainable development in communities are compatible with the strategic direction of the organization;
- ensuring the integration of requirements of the management system for sustainable development in communities into the organization's business processes;
- ensuring that the natural, human and financial resources needed for the management system for sustainable development in communities are available;
- communicating the importance of effective management of sustainable development in communities and of conforming to the requirements of the management system for sustainable development in communities;
- ensuring that the management system for sustainable development in communities achieves its intended outcome(s);
- directing and supporting persons to contribute to the effectiveness of the management system for sustainable development in communities;
- promoting continual improvement;
- supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility;
- ensuring that interested parties are involved appropriately;
- ensuring that cooperation with other communities is sought whenever this is necessary for the successful implementation of the management system for sustainable development in communities;
- releasing regular reports on sustainability progress;
- fostering exchanges of information, knowledge, experience and tools with other communities;
- facilitating the commitment of elected or appointed representatives for sustainable development.

NOTE Reference to "business" in this International Standard can be interpreted broadly to mean those activities that are core to the purposes of the organization's existence.

### 5.2 Policy

Top management shall establish a policy for sustainable development in communities that:

- is appropriate to the purpose of the organization (see also [4.5](#));
- is appropriate to the location and the economic, environmental and social context;
- considers material economic, environmental and social impacts resulting from strategies, programmes, projects, plans and services engaged in by the communities;
- provides a framework for setting objectives for sustainable development in communities;
- includes a commitment to satisfy applicable requirements;
- includes a commitment to continual improvement of the management system for sustainable development in communities;



- includes a commitment to make necessary natural, human and financial resources available to achieve strategic and operational objectives;
- advocates values, sustainable lifestyles, sustainable procurement;
- establishes adequate incentives to encourage sustainable endeavours;
- establishes innovative administrative procedures to ensure sustainable development needs are reflected and embedded in daily routines;
- sets up a platform to involve interested parties and to aid decision-making, as well as operating and continual improvement.

The policy for sustainable development in communities shall:

- be available as documented information;
- be communicated within the organization;
- be available and communicated to interested parties, as appropriate.

### **5.3 Organizational roles, responsibilities and authorities**

Top management shall ensure that the responsibilities and authorities for relevant roles are assigned and communicated within the organization.

Top management shall appoint a management representative from the top management level and assign the responsibility and authority for:

- ensuring that the management system for sustainable development in communities conforms to the requirements of this International Standard;
- reporting to top management on the performance of the management system for sustainable development in communities.

Roles, responsibilities and the organizational chart shall be clearly defined, documented and communicated.

### **5.4 Responsibility for identification of community sustainability issues**

Top management shall ensure that community sustainability issues are identified and addressed through transparent engagement with interested parties, and in accordance with [4.6](#).

Top management shall assign responsibility to ensure that the impacts of community strategies, programmes, projects, plans and services related to community sustainability issues are assessed, and that documented information is maintained.

## **6 Planning**

### **6.1 Actions to address risks and opportunities**

#### **6.1.1 General**

When planning for the management system for sustainable development in communities, the organization shall consider the issues referred to in [4.1](#) and [4.5](#) and the requirements referred to in [4.2](#) and determine the risks and opportunities that need to be addressed to:

- a) give assurance that the management system for sustainable development in communities can achieve its intended outcome(s);



- b) draw action and business plans;
- c) forecast short-, mid- and long-term economic, environmental and social impacts;
- d) prevent, or reduce, undesired effects;
- e) allocate necessary natural, human and financial resources;
- f) attribute responsibility for implementation, supervision and evaluation;
- g) establish implementation schedule;
- h) achieve continual improvement.

The organization shall plan:

- a) actions to address these risks and opportunities;
- b) how to:
  - establish medium- to long-term projections and to allocate financial resources accordingly;
  - foster financial innovation to mitigate risks;
  - integrate and implement the actions into the processes of its management system for sustainable development in communities;
  - evaluate the effectiveness of these actions.

Risks and opportunities plans shall be documented and reviewed where applicable.

### 6.1.2 Baseline review

The organization shall conduct a baseline review to establish a reference for setting and monitoring priorities at planned intervals for the development of a sustainability strategy. On the basis of the purposes of sustainability identified in 4.5, the organization shall review and map the baseline situation, including the baseline situation.

On the basis of the purposes of sustainability identified in 4.5, the organization shall review and map:

- the organization's status, with respect to its compliance obligations;
- the relevance of existing policies, objectives and targets;
- the relevance of existing instruments, including programmes, policies, plans and projects.

The organization shall determine the following and establish priorities on the basis of them:

- the scope of the review;
- the methods for reviewing, analysing and evaluating, as applicable, to ensure valid results;
- the interested parties to involve when reviewing, analysing and evaluating;
- the schedule of the baseline review;
- the schedule of the baseline review's analysis and evaluation.

The outputs of the baseline review shall include recommended short-, mid-, and long-term priorities of communities with regard to sustainable development.

The organization shall retain appropriate documented information for future use.

### **6.1.3 Compliance obligations**

The organization shall:

- determine and have access to the compliance obligations related to its sustainability issues;
- determine how these compliance obligations apply.

The organization shall maintain documented information of its compliance obligations.

NOTE Compliance obligations can result in risks and opportunities to the organization.

### **6.1.4 Determining the significance of sustainability issues**

In order to determine the significance of sustainability issues identified in 4.6 and in the sustainable development strategy, and in order to select sustainable development objectives referred to in 6.2, the organization shall consider the following criteria, when reviewing strategies, programmes, projects, plans and services:

- the magnitude of impacts, i.e. the size and severity of the impacts;
- the time period over which the impacts occur;
- whether the impacts are permanent or temporary, reversible or not, e.g. loss of green space or habitat through permanently altered land use, compared to damage or disruption to habitat from erecting temporary structures;
- whether the impacts are positive or negative, i.e. although identification of issues generally tends to identify negative consequences of activities, it is also important to appreciate that activities can also generate positive impacts;
- whether there are cumulative impacts;
- whether there are secondary or indirect impacts;
- whether there are synergistic impacts;
- the probability of the effects occurring;
- the frequency of issue occurrence.

### **6.1.5 Identifying and engaging interested parties**

The involvement of interested parties is crucial at any step in which they may be relevant. The organization shall identify and make reasonable efforts to engage them, taking into account:

- the entitlement of particular interested parties to consultation;
- the precise form of interested party identification and engagement, which depends on the size, complexity and context at a particular time.

The organization shall identify interested parties:

- that have a particular stake or may claim interest;
- whose decisions will have a significant impact;
- that have crucial information or necessary expertise;
- that are entrusted with, or may contribute to, awareness-raising or communication.

Effective involvement does not imply involving all the interested parties in all phases of the engagement process.

## 6.2 Objectives of sustainable development in communities and planning to achieve them

### 6.2.1 General

The organization shall establish, through involvement and transparent engagement with interested parties and based on sustainability issues identified as significant and a priority in [6.1.5](#), objectives of sustainable development in communities at relevant functions and levels.

The objectives shall:

- be consistent with the policy for sustainable development in communities;
- be measurable (if practicable);
- take into account applicable requirements;
- be monitored;
- be communicated;
- be updated as appropriate.

The organization shall retain documented information on the objectives for sustainable development in communities.

When planning how to achieve its objectives for sustainable development in communities, the organization shall determine:

- a) what will be done;
- b) what resources will be required;
- c) who will be responsible;
- d) when it will be completed;
- e) how the results will be evaluated.

### 6.2.2 Strategy for sustainable development

The organization shall develop a strategy for sustainable development which shall consider:

- the results of the baseline review;
- new or revised external and internal sustainability issues as described in [4.6](#);
- new or revised compliance obligations as determined in [6.1.3](#);
- the relevance of policies, objectives and targets.

The strategy shall be documented, updated as necessary and made available.

## 7 Support

### 7.1 Resources

The organization shall determine and provide the resources needed for the establishment, implementation, maintenance and continual improvement of the management system for sustainable development in communities, e.g. natural, financial, human, technological and operational resources.

NOTE Such resources include those offered by local people, organizations and infrastructures, as well as those inherent in the culture of a community.

## **7.2 Competence**

The organization shall:

- determine the necessary competence of person(s) doing work under its control that affects its performance in sustainable development in communities;
- ensure that these persons are competent on the basis of appropriate education, skills, training, or experience;
- where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken;
- retain appropriate documented information as evidence of competence.

**NOTE** Applicable actions can include, for example, the provision of training to, the mentoring of, or the reassignment of currently employed persons; or the hiring or contracting of competent persons.

Having mapped its capabilities, the organization shall plan to offer training to those in charge of implementing elements of this International Standard.

## **7.3 Awareness**

Persons doing work under the organization's control and all interested parties shall be aware of:

- the policy for sustainable development in communities;
- their contribution to the effectiveness, including the benefits of improved performance, of the management system for sustainable development in communities, including the benefits of improved performance in sustainable development in communities;
- the implications of not conforming with the requirements of the management system for sustainable development in communities.

## **7.4 Communication**

The organization shall determine the need for internal and external communications relevant to the management system for sustainable development in communities, including:

- a) on what it will communicate;
- b) when to communicate;
- c) with whom to communicate;
- d) how to communicate.

## **7.5 Documented information**

### **7.5.1 General**

The organization's management system for sustainable development in communities shall include:

- documented information required by this International Standard;
- documented information determined by the organization as being necessary for the effectiveness of the management system for sustainable development in communities.

**NOTE** The extent of documented information for a management system for sustainable development in communities can differ from one organization to another due to:

- the size of the organization and its type of strategies, programmes, plans, projects, activities, products and services;
- the complexity of processes and their interactions;
- the competence of persons.

### 7.5.2 Creating and updating

When creating and updating documented information, the organization shall ensure appropriate:

- identification and description (e.g. a title, date, author, or reference number);
- format (e.g. language, software version, graphics) and media (e.g. paper, electronic);
- review and approval for suitability and adequacy.

### 7.5.3 Control of documented information

Documented information required by the management system for sustainable development in communities and by this International Standard shall be controlled to ensure:

- a) it is available and suitable for use, where and when it is needed;
- b) it is adequately protected (e.g. from loss of confidentiality, improper use, or loss of integrity).

For the control of documented information, the organization shall address the following activities, as applicable:

- distribution, access, retrieval and use;
- storage and preservation, including preservation of legibility;
- control of changes (e.g. version control);
- retention and disposition.

Documented information of external origin determined by the organization to be necessary for the planning and operation of the management system for sustainable development in communities shall be identified, as appropriate, and controlled.

**NOTE** Access can imply a decision regarding the permission to view the documented information only, or the permission and authority to view and change the documented information.

## 8 Operation

### 8.1 Operational planning and control

The organization shall plan, implement and control the processes needed to meet requirements, and to implement the actions determined in [6.1](#), by:

- establishing criteria for the processes;
- implementing control of the processes in accordance with the criteria;
- keeping documented information to the extent necessary to have confidence that the processes have been carried out as planned.

The organization shall control planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.

The organization shall also ensure that outsourced processes are controlled.

## 8.2 Ensuring coherence of strategies, programmes, projects, plans and services

The organization shall periodically assess whether and how strategies, programmes, projects, plans and services contribute to achieving the six purposes of sustainability (see 4.5), and shall consider the 12 issues (see 4.6) that are considered priorities in sustainable development.

Indicators (see 9.1) shall be used to collect relevant data and to ensure that strategies, programmes, projects, plans and services remain on track throughout the operational phases in their respective life cycles.

## 9 Performance evaluation

### 9.1 Monitoring, measurement, analysis and evaluation

The organization shall determine:

- what needs to be monitored and measured;
- how to involve interested parties;
- the methods for monitoring, measurement, analysis and evaluation, as applicable, to ensure valid results;
- when the monitoring and measuring shall be performed;
- when the results from monitoring and measurement shall be analysed and evaluated.

The organization shall retain appropriate documented information as evidence of the results.

NOTE 1 Monitoring involves regular observation, recording and analysis of activities resulting from the management system for sustainable development, in accordance with their objectives and against its defined baseline, including social, environmental and economic data. It provides information of the direct or indirect outcomes of activities, strategies, programmes, plans, projects, etc. and enables the evaluation and reporting of their impacts.

Data are collected based on indicators for each of the issues selected (see 4.6). Depending on the agreed evaluation concept, quantitative and/or qualitative data are requested. They can be grouped among main sectors, such as:

- environmental and meteorological data (e.g. rainfall, temperature, evaporation, extent of vegetation, stream flow);
- socio-economic data (e.g. population growth, regional production, socio-economic aspects and benefits);
- financial data (e.g. budget, spending, savings, costs of activities, monetary benefits);
- project outputs (e.g. number of activities of sustainability programme completed, length of restored/re-planted river shore, number of dwellings in risk prone areas, number of energy-efficient heating systems installed).

The organization shall evaluate the performance and the effectiveness of the management system for sustainable development in communities on a regular basis, in order to:

- ensure compliance with the policy, strategic and operational objectives and compliance obligations;
- ensure that it continues to remain effective in maintaining and improving sustainability;
- revise sustainable development, smartness and resilience policies and strategic and operational objectives, as necessary.

NOTE 2 Evaluation is a planned, systematic process that compares the achievement with commitments and requirements. It assesses the efficiency, effectiveness and appropriateness of actions. Evaluation generally consists of comparing the information available before and after project implementation, e.g. to assess behavioural change in interested parties, or improvement in environmental performance. Depending on the evaluation, quantitative or qualitative data are required.

The organization shall ensure valid and accessible reporting to interested parties, including their appointed or elected representatives, giving the opportunity for feedback and constructive challenge.

Measurable performance indicators shall be used as a basis for tracking progress in achieving sustainable development and for continual improvement.

Indicators shall be objective, verifiable, reproducible and appropriate to strategies, programmes, projects, plans and services. They shall also be consistent with communities' policies, as well as practical, cost-effective and technologically feasible.

NOTE 3 ISO 37120 presents indicators for city services and quality of life. Other sets of indicators for sustainable development are reviewed in ISO/TR 37121.

Indicators may be used separately or together, although experience demonstrates that they prove more effective when used together. Interested parties shall be involved whenever appropriate.

To be relevant with the community's purposes and issues, the performance indicators shall be:

- based on a limited number of indicators, in order to be clearly informative;
- measurable, accurate and verifiable;
- representative of the purposes and issues of sustainability.

The organization shall monitor significant economic, social and environmental aspects and impacts, in accordance with its sustainable development policy and its strategic and operational objectives.

## 9.2 Internal audit

**9.2.1** The organization shall conduct internal audits at planned intervals to provide information on whether the management system for sustainable development in communities:

- a) conforms to:
  - the organization's own requirements for its management system for sustainable development in communities;
  - the requirements of this International Standard;
- b) is effectively implemented and maintained.

**9.2.2** The organization shall:

- a) plan, establish, implement and maintain an audit programme(s) including the frequency, methods, responsibilities, planning requirements and reporting, which shall take into consideration the importance of the processes concerned and the results of previous audits;
- b) define the audit criteria and scope for each audit;
- c) select auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
- d) ensure that the results of the audits are reported to relevant management;
- e) retain documented information as evidence of the implementation of the audit programme and the audit results.

NOTE The internal auditor regularly evaluates the management process and achievements as the basis for the organization's reporting and as the starting point for a baseline of the management cycle to be followed. The person appointed needs to have a thorough knowledge of the structure, procedures and responsibilities related to the organization concerned, and needs to be independent of the (part of) the organization responsible for implementing the management system.

### 9.3 Management review

Top management shall review the organization's management system for sustainable development in communities, e.g. through the involvement of interested parties, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness.

The management review shall include the engagement of interested parties and consideration of:

- a) the status of actions from previous management reviews;
- b) changes in external and internal issues that are relevant to the management system for sustainable development in communities;
- c) information on the performance in sustainable development in communities, including trends in:
  - nonconformities and corrective actions;
  - monitoring and measurement results;
  - audit results;
- d) opportunities for continual improvement.

The outputs of the management review shall include decisions related to continual improvement opportunities and any need for changes to the management system for sustainable development in communities.

The organization shall retain documented information as evidence of the results of management reviews and shall ensure recognition of the management reviews by appointed or elected representatives.

## 10 Improvement

### 10.1 Nonconformity and corrective action

When a nonconformity occurs, the organization shall:

- a) react to the nonconformity and, as applicable:
  - take action to control and correct it;
  - deal with the consequences;
- b) evaluate the need for action to eliminate the causes of the nonconformity, in order that it does not recur or occur elsewhere, by:
  - reviewing the nonconformity;
  - determining the causes of the nonconformity;
  - determining if similar nonconformities exist, or could potentially occur;
- c) implement any action needed, as appropriate;
- d) review the effectiveness of any corrective action taken;
- e) make changes to the management system for sustainable development in communities, if necessary.



Corrective actions shall be appropriate to the effects of the nonconformities encountered.

The organization shall retain documented information as evidence of:

- the nature of the nonconformities and any subsequent actions taken;
- the results of any corrective action.

## 10.2 Continual improvement

The organization shall continually improve the suitability, adequacy and effectiveness of the management system for sustainable development in communities.

The organization shall set out a route map of desirable outcomes and, periodically, determine its position along the sustainable development path using a maturity matrix.

The matrix shall comprise four or five stages along its horizontal axis and as many elements as necessary along its vertical axis. The elements chosen shall be appropriate to the community and its issue. The stages be planned as far forward along the sustainable development path as can be realistically envisaged.

See [Annex A](#).

NOTE BS 8904 provides an example of a maturity matrix.

## Annex A (informative)

### Maturity matrix

**Table A.1 — Maturity matrix**

Purpose of sustainability	Growth in maturity			
	1. Start-up – isolated initiatives	2. Establishing coherent framework	3. Integration and embedding	4. Leadership and innovation
<b>Attractiveness</b>	<ul style="list-style-type: none"> <li>— Building a community-wide approach that consciously and creatively, in a planned way, seeks to make the area or community more attractive to external parties, e.g. inward investors and to community.</li> <li>— Initial community meetings/surveys to identify local issues. Competence mapping of community skills and resources.</li> <li>— Basic initiatives to demonstrate and enhance shared benefits of mutual working and sustainability.</li> <li>— Building sense of belonging; culture; place; and identity, e.g. through using local architecture and materials, produce.</li> </ul>	<ul style="list-style-type: none"> <li>— Coordinated and structured funding applications for sustainability projects or tax/rate advantages negotiated for brown-field sites.</li> <li>— Community external promotion – materials, websites, signage, campaigns.</li> <li>— Basic needs such as security may need to be dealt with before other progress can be made.</li> </ul>	<ul style="list-style-type: none"> <li>— Create new transport infrastructure to attract inward investment.</li> <li>— Energy diversification schemes that deliver city-wide balanced resources at attractive rates.</li> </ul>	<ul style="list-style-type: none"> <li>— Build capacity for long term for wider community, i.e. shared learning.</li> <li>— Extend scope and export skills to other communities where needs.</li> <li>— For example, international beacon ISO 37101 pilot city.</li> </ul>
<b>Preservation and improvement of environment</b>	<ul style="list-style-type: none"> <li>— Initial awareness of pressing issues, e.g. threat to environmental or heritage sites – often very direct connection between issue and solution, e.g. voluntary charge for tourists on hotel bill to cover footpath repair.</li> </ul>	<ul style="list-style-type: none"> <li>— Often a useful focus for a wider discussion. Recognize need to for some relevant voluntary, academic or professional research.</li> <li>— Building education, e.g. local wardens and information signage.</li> </ul>	<ul style="list-style-type: none"> <li>— Stewardship integrated plan with substantial community and authority buy-in. Resourcing from local and wider sources. Often cross-and inter-community cooperation necessary, e.g. river course health, sites of scientific value.</li> </ul>	<ul style="list-style-type: none"> <li>— Independent accreditation valued partnership with wider authorities.</li> <li>— Clearer community accountability.</li> </ul>

Table A.1 — (continued)

Purpose of sustainability	Growth in maturity			
	1. Start-up - isolated initiatives	2. Establishing coherent framework	3. Integration and embedding	4. Leadership and innovation
<b>Resilience</b>	<ul style="list-style-type: none"> <li>— Response to short-term crises and single issues such as flood control measures. Creating basic buffers to over-correct allowing for some future risk.</li> <li>— Some initial environmental, demographic and economic forecasting.</li> </ul>	<ul style="list-style-type: none"> <li>— More complex risk awareness and modelling. Risk framework and plans for risk mitigation/adaption.</li> <li>— Coordinated responses and forward-planning as required by national agencies.</li> <li>— Some resources allocated to future risks.</li> </ul>	<ul style="list-style-type: none"> <li>— Development of social and economic depth/ diversity/ quality, e.g. Incubator units, energy diversification, local currency, start-up finance, shared IT and broadband.</li> <li>— Resilience built-in to all new physical and social initiatives. Becomes part of culture and heritage.</li> </ul>	<ul style="list-style-type: none"> <li>— Independent accreditation of risk mitigations. Community resilience index developed and shared. Integrated risk mitigation in cross- and inter-community schemes.</li> <li>— Input to national and international understanding and action.</li> </ul>
<b>Responsible resource use</b>	<ul style="list-style-type: none"> <li>— Early engagement in new schemes such as new shared transport/travel to work schemes, organic waste collection and grey water schemes.</li> </ul>	<ul style="list-style-type: none"> <li>— Building wider efficiency agenda applied in more comprehensive and planned way such as the use of green roof/city gardens, energy joint buying, car sharing, etc.</li> <li>— Resource use measurement undertaken and widely and accessibly disseminated.</li> </ul>	<ul style="list-style-type: none"> <li>— Shifting the resource balance fundamentally through changing balance of renewable energy production and consumption, using locally produced food, promoting food markets and inter-producer exchange and bargaining. Encouraging stores to sell local production.</li> <li>— Transport shifts such as bus and rail enhancement, cycle paths. Toxic site replacement and renewal.</li> </ul>	<ul style="list-style-type: none"> <li>— Resource planning long term. Long-term carbon reduction based on shared resource ownership.</li> <li>— Pioneering schemes in land-reuse, energy transformation, and pollution reduction can be case studies for others to replicate.</li> </ul>

Table A.1 — (continued)

Purpose of sustainability	Growth in maturity			
	1. Start-up – isolated initiatives	2. Establishing coherent framework	3. Integration and embedding	4. Leadership and innovation
<b>Social cohesion</b>	<ul style="list-style-type: none"> <li>— Activities and structures that bring meaning and sense of collective journey, shared experiences, common risks and opportunities, shared values and interests, responsibilities and commitment to the community and belonging.</li> <li>— Welcoming to all members of the community and newcomers and outsiders: community forum/website, public space use, celebrations, sports events that draw on local heritage and culture and traditions.</li> <li>— Common kindness and caring for weaker members of the community in need.</li> </ul>	<ul style="list-style-type: none"> <li>— Focus on reduction of inequities and increasing social integration.</li> <li>— Focus on opening accessibility to jobs, housing, opportunities, information, positions, etc.</li> <li>— Local planning or internal corporate/local government purchasing rules to require (%) use of local suppliers and employees.</li> <li>— Local occupancy clauses for sustainable and affordable housing</li> </ul>	<ul style="list-style-type: none"> <li>— Engagement of marginalised members of community offering support to vulnerable members such as food banks, refugee assistance, language training, financial support, benefits eligibility identification, housing support.</li> <li>— Conscious corporate and government procedures for positive encouragement of diversity, protection of rights and public transparency of diversity levels.</li> </ul>	<ul style="list-style-type: none"> <li>— Community defined by what holds it together rather than the boundaries that divide from others.</li> <li>— Open to ideas, dialogue/exchange and influences.</li> <li>— Multi-community networks, co-working facilities, flexible child care, shared transport schemes.</li> <li>— Creativity and artistic expression can have a powerful effect on building community identity and cohesion.</li> </ul>
<b>Well-being</b>	<ul style="list-style-type: none"> <li>— Well-being is a strong focus for the awareness of issues and starter schemes, e.g. keep fit schemes, evening education classes and litter reduction.</li> <li>— The challenge is to identify less obvious needs, e.g. stress and mental health needs, the creative use of public space and diversity of employment and housing opportunities and education.</li> </ul>	<ul style="list-style-type: none"> <li>— The temptation is to employ simple, tick box methods of identifying and measuring well-being, but communities are complex and require composite measures of well-being, often including qualitative elements such as quality of life, happiness or satisfaction.</li> <li>— Cross-issue schemes can deal with several well-being issues at once, e.g. business training/school partnerships, safety in design and neighbourhood crime-watch. One difficulty is the unknown risks emerging and the unintended consequences of new initiatives.</li> </ul>	<ul style="list-style-type: none"> <li>— As self-confidence and experience builds the community engages in longer-term, more fundamental change which may involve some costs for greater benefits. Such more radical change projects can include the multiple use of public assets such as public halls and schools and flexible work-house/co-housing.</li> <li>— The organization may be able to embed sustainable development purposes through local government policies, planning and tax and rent controls.</li> </ul>	<ul style="list-style-type: none"> <li>— Community explicitly recognized, managed and evaluated as a human capital.</li> <li>— Well-being understood in deeper and more complex ways, as expectations change, incorporating the diversity and evolving nature of all generations.</li> <li>— Community promotion of well-being and sustainable development. Influence on wider agendas. Used as case study.</li> <li>— Inward investment includes well-being value(s) and a commitment to extend and build capacity and engagement.</li> </ul>

## Annex B (informative)

### Mapping of issues, indicators and metrics

**Table B.1 — Mapping of issues, indicators and metrics between ISO 37101:2016, ISO 37120:2014 and ISO/TS 37151:2015**

ISO 37101:2016 Issues related to sustainable development in communities	ISO 37120:2014 Indicators for city services and quality of life	ISO/TS 37151:2015	
		Needs and performance characteristics of smart infrastructure metrics	Examples
<a href="#">4.6.2</a> Governance, empowerment and engagement	<b>11</b> Governance	—	—
<a href="#">4.6.3</a> Education and capacity building	<b>6</b> Education	—	—
<a href="#">4.6.4</a> Innovation, creativity and research	<b>17</b> Telecommunication and innovation	— Availability	— Population coverage
<a href="#">4.6.5</a> Health and care in the community	<b>12</b> Health	— Conservation of ecosystem	— Contribution to human and public health
<a href="#">4.6.6</a> Culture and community identity	<b>Annex B</b> Profile indicators	— Availability — Affordability	— Temporal coverage — Areal coverage — Population coverage — Stability — Capability of being accessed and used by a wide range of people
<a href="#">4.6.7</a> Living together, interdependence and mutuality	<b>11</b> Governance <b>14</b> Safety	— Safety and security	— Safety — Cyber security and data privacy — Physical security
<a href="#">4.6.8</a> Economy and sustainable production and consumption	<b>5</b> Economy <b>9</b> Finance	— Economic efficiency — Affordability	— Total life cycle cost — Investment efficiency — Service price
<a href="#">4.6.9</a> Living and working environment	<b>12</b> Health <b>13</b> Recreation <b>15</b> Shelter <b>19</b> Urban planning	— Quality of service <sup>a</sup> — Safety and security <sup>a</sup> — Conservation of ecosystems <sup>a</sup>	— Service capacity <sup>a</sup> — Easy procedure to use per invoicing — Community infrastructure-specific qualities — Physical security <sup>a</sup> — Provision of information — Control of surface runoff and drainage — Amount of green space <sup>a</sup>
<sup>a</sup> Example taken from ISO/TS 37151:2015, Annex B.			

Table B.1 (continued)

ISO 37101:2016 Issues related to sustainable development in communities	ISO 37120:2014 Indicators for city services and quality of life	ISO/TS 37151:2015	
		Needs and performance characteristics of smart infrastructure metrics	Examples
<a href="#">4.6.10</a> Safety and security	<b>14</b> Safety	— Safety and security	— Safety — Cyber security and data privacy — Physical security
<a href="#">4.6.11</a> Smart community infrastructures	<b>7</b> Energy <b>10</b> Fire and emergency response <b>16</b> Solid waste <b>17</b> Telecommunication and innovation <b>18</b> Transportation <b>20</b> Wastewater <b>21</b> Water and sanitation	— Availability — Quality of service — Operational efficiency — Resilience — Conservation of ecosystems	— Population coverage — Areal coverage — Stability — Service capacity — Easy procedure to understand and use — Proper invoicing — Community infrastructure-specific qualities — Provision of information — Appropriate size of facilities — Operational efficiency — Control of surface runoff and drainage — Robustness — Redundancy — Substitutability — Swift recovery — Contribution to human and public health
<a href="#">4.6.12</a> Mobility	<b>18</b> Transportation	— Availability	— Population coverage — Areal coverage
<a href="#">4.6.13</a> Biodiversity and ecosystem services	<b>8</b> Environment	— Effective use of resources — Mitigation of climate change — Prevention of pollution	— Efficiency of energy consumption — Efficiency of natural resources consumption — Net amount of waste — Amount of greenhouse gas emission — Amount of pollutant emission — Level of sensory nuisance — Contribution to human and public health

<sup>a</sup> Example taken from ISO/TS 37151:2015, Annex B.

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