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## **Sustainable development of communities — Management systems — Requirements with guidance for resilience and smartness**

*Développement durable des collectivités humaines — Système de management — Exigences et lignes directrices pour la résilience et l'intelligence*

ICS 13.020.20

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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)).

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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 WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword Supplementary information](#)

ISO 37101 was prepared by Technical Committee ISO/TC 268, *Sustainable development in communities*.

## Introduction

This international standard establishes the requirements of a management system for sustainable development and provides guidance on smartness and resilience of communities, taking compliance obligations and relevant information into consideration, in order to:

- manage sustainability and foster smartness and resilience of communities, while taking into account the territorial boundaries to which it applies;
- improve the contribution of communities to sustainable development;
- assess the performance of communities in progressing towards sustainable development and the level of smartness and of resilience that they have achieved.

NOTE 1 the auxiliary verb "shall" is used to establish requirements.

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

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 the community level are, to a large extent, local and may therefore differ in context and content from country to country and region to region. Hence, community strategies should 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, a community faces another challenge: to respect planetary boundaries and to take the limitations they imply into account.

NOTE The concept of the Planetary Boundaries describes a framework within which humanity must live in order to continue to develop and thrive for generations to come.

Climate Change, Freshwater Consumption, Land system 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.

The Planetary Boundaries can be broken down in order to select measures addressable at community level while taking into account the specific situation.

The management of sustainable development of 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 may have strategic, operational and competitive implications.

NOTE The capacity to foster cross-discipline harmony and common purpose is fundamental to effective and efficient achievement of the community's objectives.

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This International Standard focusses on communities as a stepping stone towards sustainability of the society as a whole. Communities are composed of a variety of entities and of people living, working and interacting with each other.

Although each of them has values and interests of their own, they may derive mutual benefits from a multi-actor process, which builds ownership of shared values and objectives, without exonerating individual actors from their respective responsibilities.

This may 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 standard fosters the establishment of a multi-actor process and a degree of organization in communities. It sets out requirements and guidance to achieve a suitable framework. It will be a source of inspiration and of guidance for all sectors, e.g. energy, health, safety, transport, water or waste, whether directly or indirectly involved in sustainable development of communities at different stages in their life cycles. In that sense, this standard differs from other management system standards that apply to a single organization with an in-house clear-cut governance structure.

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

- participatory partnerships;
- public participation;
- community based collaboration: or
- stakeholder involvement.

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

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

More specifically, the successful implementation of this standard will:

- generate and build up consensus on sustainable development within communities;
- improve the sustainability, smartness and resilience of strategies, programs, 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;
- increase efficiency and attractiveness.

Relevant indicators and metrics should be used in that regard, as they measure the outcome of strategies, programs, projects, plans and services throughout communities.

The standards developed by ISO/TC 268 - Sustainable development in communities - are depicted in Figure 1 below. They are intended to make use of indicators and metrics for structured and consistent support of sustainable, smart and resilient management of communities.

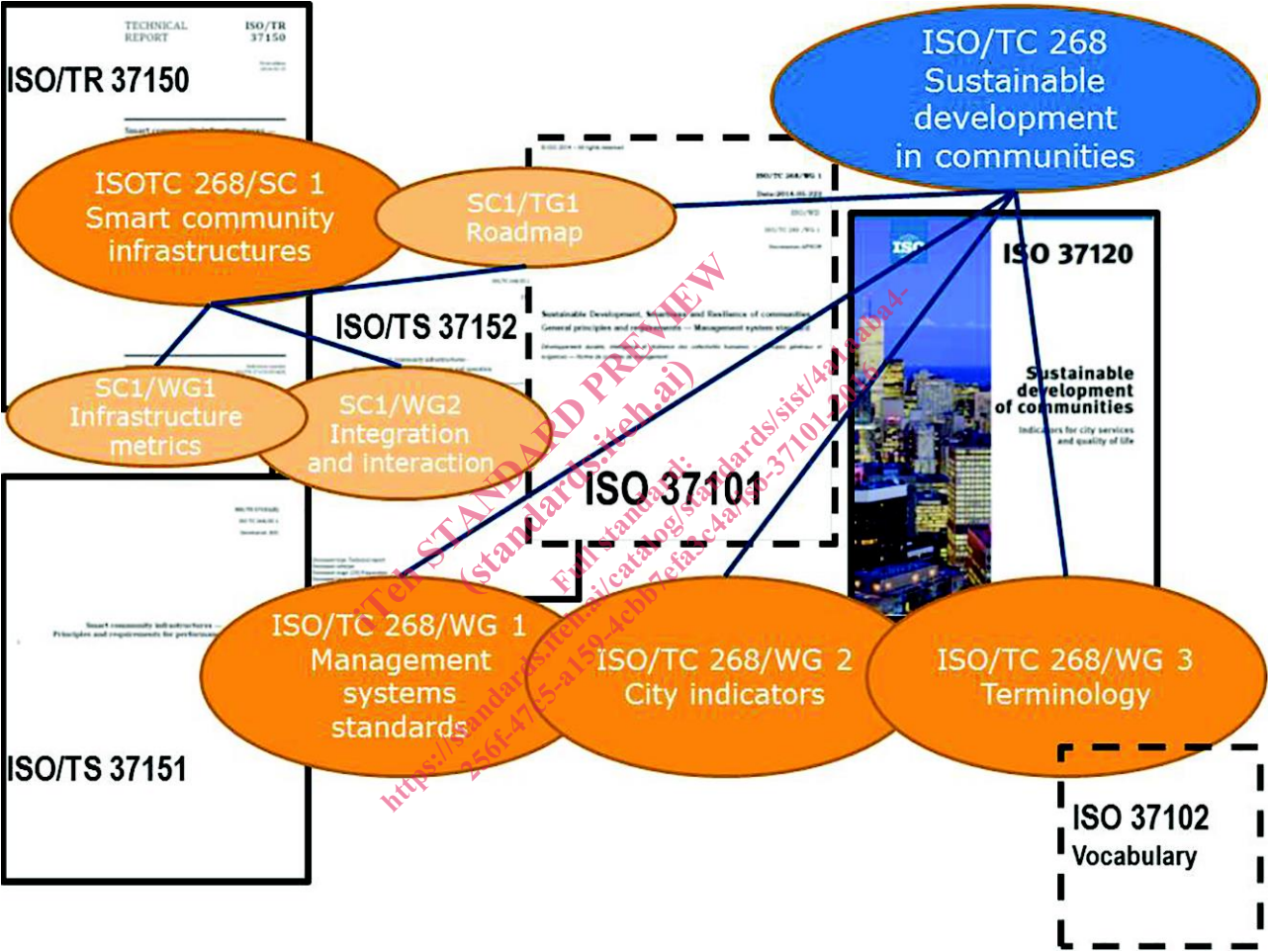


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Indicators, such as those in ISO 37120, are a quantitative, qualitative or descriptive measures defined for actual use in monitoring the overall performance of e.g. a community or a city.

In contrast, metrics, such as those in ISO TS 37151, are the measurement method and measurement scale defined for use in monitoring the technical performance of infrastructure elements (hardware and software) in e.g. energy, transport or waste management services.

Metrics and indicators are therefore connected, but often developed for different reasons. Metrics have a more technical focus – a parameter of the performance of e.g. a product or a process, an infrastructure element or similar.



**Figure 1 — TC 268 deliverables inventory**

A full frame indicates that the standard or deliverable was published, while a punctuated frame indicates that it is still under development.



As all management system standards, this standard is based on a PDCA approach, which can briefly be described as follows:

- **PLAN:** establish objectives and processes necessary to deliver results in accordance with communities purposes;
- **DO:** implement processes and achieve objectives;
- **CHECK:** monitor and measure processes against community policy, objectives, compliance obligations, and report the results;
- **ACT:** take necessary actions to improve performance.

As described in the figure below, the content of this standard reflects the adoption and the adaptation of a PDCA approach to the management of sustainable development, smartness and resilience of communities.

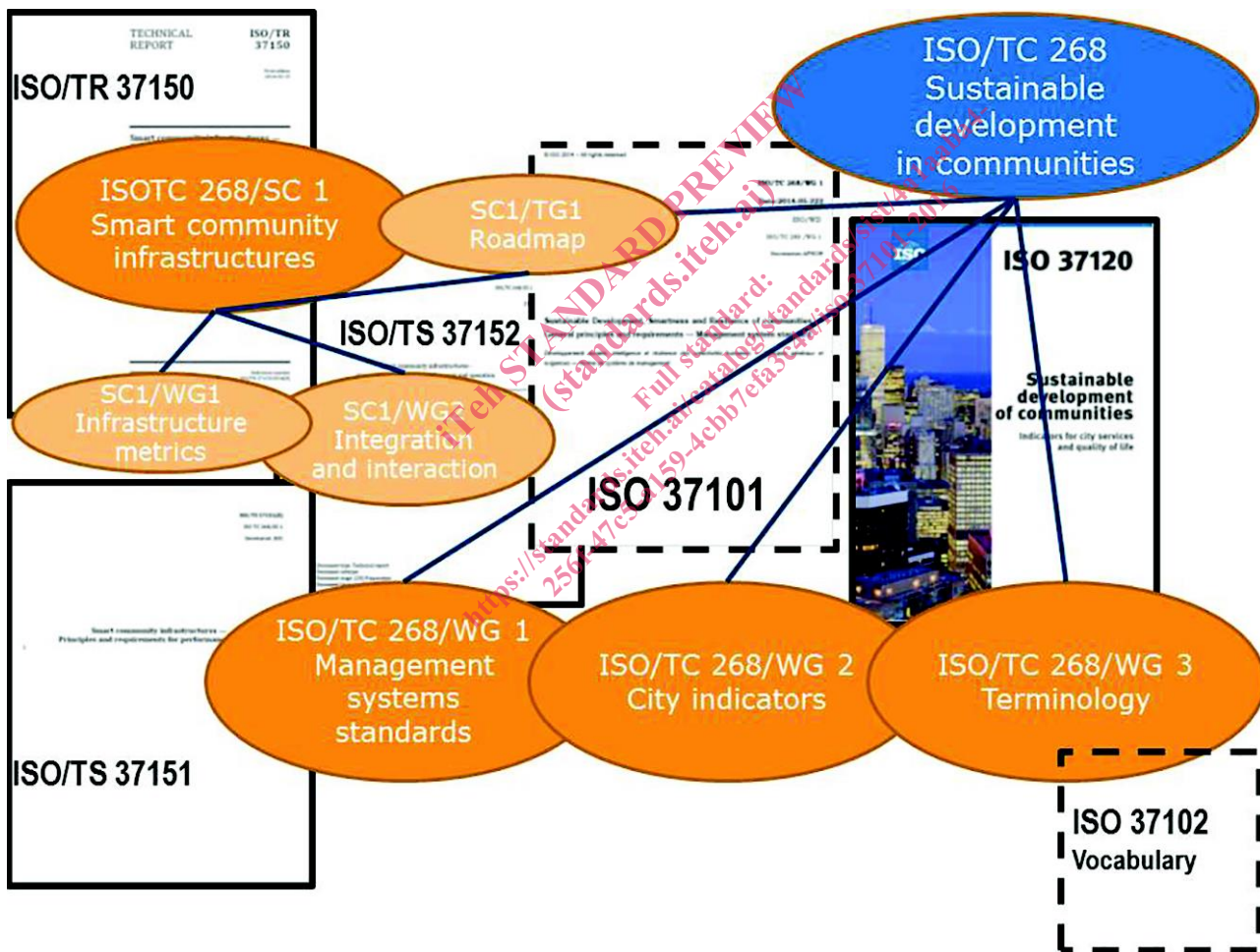


Figure 2— ISO 37101 illustrated table of contents

Strategic steps are iterative, while operational steps are sequential. It is their combined implementation that helps communities become more sustainable, resilient and smart, as illustrated by the green arrow

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# Sustainable development of communities — Management system — Requirements with guidance for resilience and smartness

## 1 Scope

This international standard specifies requirements for establishing, implementing, maintaining and improving management systems that enable communities to follow a systematic approach to sustainable development. Since sustainable development is the overarching process and goal, while smartness and resilience are characteristics, the latter are embedded in the former.

This international standard is intended to help Communities become more resilient, smart and sustainable, through the implementation of strategies, programs, projects, plans and services and to demonstrate and communicate their achievements.

It is intended to be applied in and by communities of all size, structure and type, in developed or developing countries, at local, regional or national levels in defined urban or rural areas at their respective level of responsibility.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

There are no normative references to this International standard.

## 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 organization's governing bodies, legal authorities and, more broadly, its stakeholders.

### 3.2 audit

*systematic, independent and documented **process (3.30)** for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled.*

*NOTE 1 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 "audit evidence" and "audit criteria" are defined in ISO 19011.*

### 3.3

#### **city**

urban community falling under a specific administrative boundary, commonly referred to as a city, municipality or local government.

NOTE a city is a subset of a community.

[ISO 37120:2014]

### 3.4

#### **community**

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

NOTE the definition may be interpreted differently depending on the context of use. In many cases, a community has a defined geographical boundary.

[ISO 24510:2007, 2.7, modified and adapted to sustainable development and resilience of communities]

### 3.5

#### **competence**

*ability to apply knowledge and skills to achieve intended results.*

### 3.6

#### **compliance obligation**

**requirement (3.21)** that an **organization (3.1)** has to or chooses to comply with.

NOTE obligations may arise from mandatory requirements (3.21), 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.

[ISO 19600]

### 3.7

#### **conformity**

*fulfilment of a **requirement (3.31)**.*

### 3.8

#### **continual improvement**

*recurring activity to enhance **performance (3.27)**.*

### 3.9

#### **correction**

*action to eliminate a detected **nonconformity (3.22)**.*

### 3.10

#### **corrective action**

*action to eliminate the cause of a **non-conformity (3.22)** and to prevent recurrence.*

### 3.11

#### **documented information**

*information required to be controlled and maintained by a **community (3.3)** and the medium on which it is contained.*

NOTE *documented information can be in any format and media and from any source.*

*NOTE* documented information can refer to:

- the management system (3.18), including related processes (3.30);
- information created in order for the community to operate (documentation);
- evidence of results achieved (records).

### 3.12 ecosystem services

benefits provided by ecosystems that contribute to making human life both possible and worth living.

[Ecosystem and well-being, UNEP Millennium ecosystem services report, 2005]

### 3.13 effectiveness

*extent to which planned activities are realized and planned results achieved.*

### 3.14 evaluation

systematic **process (3.30)** of determining how well individuals, procedures, systems or programs have met formally agreed **objectives (3.23)** and **requirements (3.31)**.

[ISO 10795, 2011, 1.90]

### 3.15 greenhouse gas emission (GHG)

total mass of a GHG released to the atmosphere over a specified period of time.

[ISO 14064-1, 2006]

### 3.16 impact

positive or negative change to society, economy or the environment, wholly or partially resulting from a **community's (3.3)** past and present decisions and activities.

[ISO 26000:2010, 2.9, modified and adapted to sustainable development and resilience of communities]

### 3.17 indicator

a quantitative, qualitative or descriptive measure.

[SOURCE: ISO 15392:2008, 3.14]

### 3.18 interested party

*person or organization (3.25) that can affect, be affected by, or perceive itself to be affected by a decision or activity.*

*NOTE 1* all sectors, e.g. energy, health, safety, transport, water, waste, etc., whether directly or indirectly involved in **sustainable development (3.35)** and **resilience (3.32)** of communities at different stages in their **life cycles (3.17)**, may find useful guidance in the present standard.

*NOTE 2* in this standard, interested parties are to be understood as including all stakeholders.