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## Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

## UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

## Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

## Template for comments and secretariat observations

|                  |                        |
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| 1  | 2                                          | (3)                          | 4               | 5                                                                                                                                  | (6)                                                                      | 7                                                  |
|----|--------------------------------------------|------------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------|
| MB | Clause No./ Subclause No./Annex (e.g. 3.1) | Paragraph/ Figure/Table/Note | Type of comment | Comment (justification for change) by the MB                                                                                       | Proposed change by the MB                                                | Secretariat observations on each comment submitted |
|    | 3.1                                        | Definition 1                 | ed              | Definition is ambiguous and needs clarifying.                                                                                      | Amend to read '...so that the mains connector to which no connection...' |                                                    |
|    | 6.4                                        | Paragraph 2                  | te              | The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK. | Delete reference to UV photometer.                                       |                                                    |



# DRAFT International Standard

## ISO/DIS 16483

### Sustainable mobility and transportation — Digital governance — Indicators

ICS: 35.240.60; 13.020.20

ISO/TC 268/SC 2

Secretariat: JISC

Voting begins on:  
**2025-05-15**

Voting terminates on:  
**2025-08-07**

This document is circulated as received from the committee secretariat.

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

This document was prepared by Technical Committee ISO/TC 268, Sustainable cities and communities, Subcommittee SC 02, Sustainable mobility and transportation

A list of all parts in the ISO ##### series can be found on the ISO website.

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

## Introduction

This standard aims at providing a framework to produce relevant indicators supporting any sustainable mobility project.

It will support mobility stakeholders and especially transport authorities in the emergence, the realization and the management of contributive solutions to the objectives of sustainability depicted in ISO 37101.

This standard is the second item of an intended set composed of the following 2 items:

- ISO 16481: «Sustainable mobility and transportation – Digital Governance – Strategic needs regarding ISO 37101 purposes of sustainability» to build a vision about the functional and environmental needs on systems composing the mobility system.
- ISO 16483: «Sustainable mobility and transportation – Digital Governance – Indicators» to identify and standardize the metrics that will allow to quantify the evolution of the sustainable mobility system.

And the forthcoming New Work Item Proposal:

- “Sustainable mobility and transportation – Digital Governance – Mobility data framework”  
Mobility data governance is the cornerstone of the capabilities of a sustainable mobility system, that is, to recall it, a complex system of systems: Standardizing data semantics, data services and data exploitation rules are among the key topics of the proposal.

This document covers the ISO 16483 only.

This standard provides guidance to develop indicators that are:

- Consistent with the steps specified in ISO 16481 et ISO 37101
- Differentiated according to status, objective, impact, means
- Adaptable to sustainable mobility plans and their specific needs
- Measuring performance of mobility services.



# Sustainable mobility and transportation — Digital governance — Indicators

## 1 Scope

This international standard applies to the digital governance part of the mobility system of a city engaged in sustainability. It aims at achieving sustainability goals of the local community.

It targets urban mobility and its connections with intercity and other long-distance transport solutions. It applies to mobility of people and goods.

This document defines and establishes methodologies for developing a set of indicators to steer and measure the performance of sustainable mobility offers.

It follows the principles set out in ISO 37101 and should be used in conjunction with ISO 16481. This document is applicable to any city, municipality or local authority that undertakes to measure its performance in a comparable and verifiable manner, irrespective of size and location. It aims at helping mobility policy planners to measure the performance of the mobility systems.

## 2 Normative references

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

ISO 37101:2016, *Sustainable development in communities — Management system for sustainable development — Requirements with guidance for use*

ISO 16481-202X, *Sustainable mobility and Transportation – Digital Governance – Strategic needs regarding ISO 37101 purposes of sustainability*

## 3 Terms and Definitions Terminology

For the purposes of this standards set, outlined in the introduction chapter, the following terms and definitions apply.

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

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

### 3.1 Definitions on organizations

#### 3.1.1

##### city

urban *community* ([3.1.2](#)) 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* ([3.1.6](#)).

[SOURCE: ISO 37120:2018, 3.1, modified — Definition has been modified and Notes 1 and 2 to entry have been added.]

### 3.1.2

#### **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* ([3.1.1](#)) 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.]

### 3.1.3

#### **interested party** (preferred term)

Stakeholder (admitted term)

person or *organization* ([3.1.4](#)) that can affect, be affected by, or perceive itself to be affected by a decision or activity

[SOURCE: ISO 37100:2016, 3.2.5]

### 3.1.4

#### **organization**

person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* ([3.2.6](#))

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* ([3.1.2](#)) that is tasked with implementing the *management system* ([3.2.2](#)), e.g. the local government. The community identifies an organization that it entrusts with the implementation of this International Standard.

[SOURCE: ISO 37100:2016, 3.2.3]

### 3.1.5

#### **top management**

person or group of people who directs and controls an *organization* ([3.1.4](#)) at the highest level

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

[SOURCE: ISO 37100:2016, 3.3.2]

### 3.1.6

#### **policy**

intentions and direction of an *organization* ([3.1.4](#)), as formally expressed by its *top management* ([3.1.5](#))

[SOURCE: ISO 37100:2016, 3.3.9]

### 3.1.7

#### **resilience**

adaptive capacity of an *organization* ([3.1.4](#)) in a complex and changing *environment*

Note 1 to entry: The Intergovernmental Panel on Climate Change (IPCC)[21 ] 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* ([3.2.7](#)) 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.]

## 3.2 Definitions on project management

### 3.2.1

#### **indicator**

quantitative, qualitative or descriptive measure

[SOURCE: ISO 15392:2019, 3.18]

### 3.2.2

#### **management system**

set of interrelated or interacting elements of an *organization* (3.1.4) to establish *policies* (3.1.6) and *objectives* (3.2.6) and *processes* (3.2.8) 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.

[SOURCE: ISO 37100:2016, 3.3.1]

### 3.2.3

#### **measurement**

*process* (3.2.8) to determine a value

[SOURCE: ISO 37100:2016, 3.4.7]

### 3.2.4

#### **metric**

defined *measurement* (3.2.3) method and measurement scale

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

### 3.2.5

#### **monitoring**

continuous or repeated checking, supervising, critically observing, measuring or determining the status of a system to identify variance from an expected performance level or baseline, intended to control the system

[SOURCE: ISO/TS 23565:2021, 3.12]

### 3.2.6

#### **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* (3.2.8)].

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* (3.4.2) in *communities* (3.1.2), 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* (3.2.2) for sustainable development in communities, objectives for sustainable development in communities are set by the *organization* (3.1.4), consistent with the policy (3.30) for sustainable development in communities, to achieve specific results.