BS ISO 37124:2024

BSI Standards Publication

Sustainable cities and communities — Guidance on the use of ISO 37120, ISO 37122 and ISO 37123

Documents
Document Sharing Hub

Full document details: BS ISO 37124:2024

National foreword

This British Standard is the UK implementation of ISO 37124:2024.

The UK participation in its preparation was entrusted to Technical Committee SDS/2, Smart and sustainable cities and communitiesSustainable Communities.

A list of organizations represented on this committee can be obtained on request to its committee manager.

Contractual and legal considerations

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

© The British Standards Institution 2024
Published by BSI Standards Limited 2024

ISBN 978 0 539 15970 7

ICS 13.020.20

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 April 2024.

Amendments/corrigenda issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: BS ISO 37124:2024

International Standard

ISO 37124

Sustainable cities and communities — Guidance on the use of ISO 37120, ISO 37122 and ISO 37123

First edition
2024-04

Reference number
ISO 37124:2024(en)

© ISO 2024

Documents
Document Sharing Hub

Full document details: BS ISO 37124:2024

COPYRIGHT PROTECTED DOCUMENT

© ISO 2024

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

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

Published in Switzerland

Documents
Document Sharing Hub
Full document details: BS ISO 37124:2024

Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**

4 Guidance for implementing ISO 37120, ISO 37122 and ISO 37123 ... **1**
4.1 General ... 1
4.2 Sources of data for indicators in ISO 37120, ISO 37122 and ISO 37123 ... 2

5 Guidance for implementing ISO 37120 ... **2**
5.1 General ... 2
5.2 Indicators for performance management ... 3
5.3 Indicators for benchmarking and comparison ... 3
5.4 Indicators for building high caliber data sets ... 3
5.5 Indicators for policy development, economic development planning, and priority setting ... 3
5.6 Indicators for responding to global climate challenges, health events, and demographic change. ... 3
5.7 Criteria for selecting indicators ... 4
5.8 Data interpretation ... 5

6 Guidance for implementing ISO 37122 ... **6**
6.1 General ... 6
6.2 How to use ISO 37122 indicators ... 6
6.3 Guidance on how to use ISO 37122 in conjunction with ISO 37120 ... 7

7 Guidance for implementing ISO 37123 ... **7**
7.1 General ... 7
7.2 Guidance on how to use ISO 37123 in conjunction with ISO 37120 ... 8

8 Guidance on how to use ISO 37120, ISO 37122 and ISO 37123 in parallel across the 19 themes ... **8**

9 How to use ISO 37120, ISO 37122 and ISO 37123 to monitor progress on the Sustainable Development Goals (SDGs) ... **21**

Bibliography ... **23**

© ISO 2024 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 37124:2024

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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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

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

This document was prepared by Technical Committee ISO/TC 268, *Sustainable cities and communities*.

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.

© ISO 2024 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 37124:2024

Introduction

Cities need indicators to measure their performance in the delivery of services, to monitor quality of life, and in order to create policies for sustainable futures. Existing indicators at the local level are often not standardized, consistent, or comparable over time or across cities. This is due to different definitions and methodologies in what is measured. ISO/TC 268 has developed a series of standards for standardizing city indicators, including ISO 37120 (indicators for sustainable cities), ISO 37122 (indicators for smart cities), and ISO 37123 (indicators for resilient cities). ISO 37120, ISO 37122 and ISO 37123 focus on city services and quality of life, smart city development and resilience planning as a contribution to a city's overall sustainability. This document provides guidance for users to implement ISO 37120, ISO 37122 and ISO 37123.

ISO 37120 has quickly become the international reference for sustainable cities. With increased use of ISO 37120, ISO/TC 268 has identified the need for additional indicators for smart cities and resilient cities. This demand for additional indicators led to the development of ISO 37122 on indicators for smart cities and ISO 37123 on indicators for resilient cities.

Both ISO 37122 and ISO 37123 are intended to be used in conjunction with ISO 37120. This guidance document is intended to support cities in implementing ISO 37120, ISO 37122 and ISO 37123. ISO 37120 is the core standard for sustainable cities. Cities conforming to ISO 37122 or ISO 37123 are intended to conform to ISO 37120 first. ISO 37122 and ISO 37123 were developed to support cities in their sustainability efforts by including the critical agendas of the smart and resilient city as essential for holistic city sustainability.

ISO 37120, ISO 37122 and ISO 37123 provide a holistic and integrated approach to sustainable development, including a set of standardized indicators for a uniform approach to the collection and standardization of city data, focussing on what is measured, and how that measurement is to be undertaken. The indicators contained within ISO 37120, ISO 37122 or ISO 37123 do not provide a value judgement, threshold or numerical target value.

The definition of cities as “[an] urban community falling under a specific administrative boundary” used in ISO 37120, ISO 37122 and ISO 37123 and this document, refers to the city administrative area. Using the city's administrative boundary, comparative values worldwide are more easily standardized. Moreover, cities report indicators in accordance with service delivery boundaries. This creates an opportunity to gather a better understanding of the city services provided and a clearer measure of residents' quality of life within a city’s administrative boundary.

ISO 37120, ISO 37122 and ISO 37123 have been developed with cities of all sizes in mind. The standards can be used by small and medium-sized cities, as well as large cities. ISO 37120, ISO 37122 and ISO 37123 are applicable to any city, municipality or local government that undertakes to measure its performance in a comparable and verifiable manner, irrespective of size and location.

In particular, ISO 37120, ISO 37122 and ISO 37123 and their indicators can be used for the implementation of the following standards: ISO 37101, ISO 37104, ISO 37106, ISO/TS 37107, ISO/TS 37151, ISO 37153, and, ISO 37156.

This guidance document will support users in implementing ISO 37120, ISO 37122 and ISO 37123 on city data by:

— providing an overview of the ISO 37120, ISO 37122 and ISO 37123 standards;

— helping cities understand the importance of city indicators in supporting their sustainability efforts;

— providing guidance on how to use ISO 37120, ISO 37122 and ISO 37123 together for city indicators;

— showcasing international efforts and examples of how cities have implemented ISO 37120, ISO 37122 and ISO 37123.

The structure of ISO 37120, ISO 37122 and ISO 37123 reflects the relationship between sustainable, resilient, and smart development (see Figure 1).

© ISO 2024 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 37124:2024

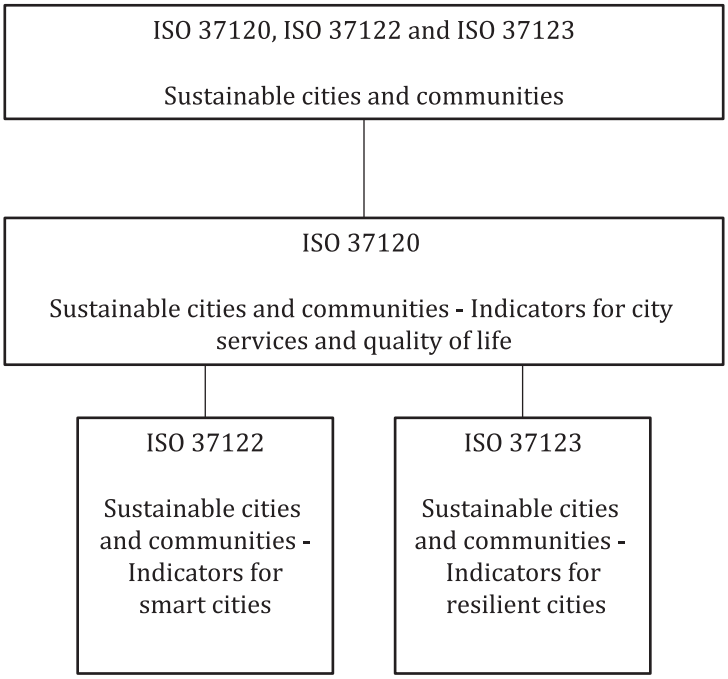

Figure 1 — Relationship between ISO 37120, ISO 37122 and ISO 37123 — Indicators for sustainable development of cities

© ISO 2024 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 37124:2024

Sustainable cities and communities — Guidance on the use of ISO 37120, ISO 37122 and ISO 37123

1 Scope

This document provides guidance on how to use and implement ISO 37120, ISO 37122 and ISO 37123.

ISO 37120, ISO 37122 and ISO 37123 specify definitions and methodologies for a set of indicators to steer and measure the performance of city services as well as quality of life, smart city development and resilience planning. ISO 37120, ISO 37122 and ISO 37123 supports cities in achieving their goals towards sustainable development and includes indicators for measuring smart city development and risk assessments for building smart, resilient and sustainable cities.

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 37120:2018, *Sustainable cities and communities — Indicators for city services and quality of life*

ISO 37122:2019, *Sustainable cities and communities — Indicators for smart cities*

ISO 37123:2019, *Sustainable cities and communities — Indicators for resilient cities*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 37120, ISO 37122 and ISO 37123 apply.

ISO and IEC maintain terminology 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/

4 Guidance for implementing ISO 37120, ISO 37122 and ISO 37123

4.1 General

ISO 37120 can be used on its own, while ISO 37122 and ISO 37123 are intended to be used together and in conjunction with ISO 37120 to provide the most comprehensive overview of city services and quality of life. In order to implement ISO 37122 or ISO 37123, ISO 37120 must be implemented.

ISO 37120 divides indicators into core and supporting indicators. Reporting core indicators is required by ISO 37120, while reporting supporting indicators is recommended. ISO 37122 and ISO 37123 do not contain core and supporting indicators. Users may select the indicators in ISO 37122 and ISO 37123 that are relevant and appropriate to their needs.

ISO 37120, ISO 37122 and ISO 37123 applies to cities of all sizes. Much of the data generated through the key performance indicators are normalized by 1/100 000th of the population. This approach enables cities of different sizes to benchmark and share lessons globally. In certain instances where countries have adopted ISO 37120, ISO 37122 and ISO 37123, information representing 1/1 000th of the population is collected.

© ISO 2024 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 37124:2024

In those cases, a mathematical adjustment is necessary to reflect this difference in the resulting data. In certain cases, using the 1/1 000th methodology can be more applicable for small cities.

4.2 Sources of data for indicators in ISO 37120, ISO 37122 and ISO 37123

Data for the indicators in ISO 37120, ISO 37122 and ISO 37123 can be sourced from:

— city departments responsible for the specific services;

— national statistics bodies;

— sub-national or national ministries and departments;

— utilities and energy providers;

— NGOs and international organizations working on related measures;

— citizens;

— universities;

— other research bodies.

Indicators should be reported for the administrative boundary of the city, in order to ensure comparability globally. If data are not available for the administrative boundary of the city, the next available level should be reported (for example, from a county or regional level of government). This alternative boundary should be documented. However, efforts should be made to disaggregate this data to the city's administrative boundary and report this data accordingly in future years. A selection of indicators in ISO 37120, ISO 37122 and ISO 37123 can potentially be disaggregated for use in communities, business improvement areas and other specially designated areas. However, most of the indicators are concerned with service delivery across the city as a whole, and performance management by city administrations in that service delivery.

Some indicators, especially in ISO 37122, can require data from third-party technology and infrastructure providers. Often, this data is not shared with cities; therefore, it is important for cities to establish partnerships and open data protocols with third-party suppliers.

Data for many of the indicators in ISO 37123 can be sourced from international organizations with a specific focus on city resilience. Some data can be available from sub-national or national emergency response agencies, as well as international organizations that work on emergency response, such as the Red Cross.

Clauses 5, 6 and 7 provide guidance on the implementation of ISO 37120, ISO 37122 and ISO 37123 respectively.

5 Guidance for implementing ISO 37120

5.1 General

ISO 37120 is the first international standard published for cities (the first edition was published in 2014). It specifies indicators to track and monitor the progress of city performance. When considering sustainable development through the lens of a city, the entire urban ecosystem needs to be considered. Planning for future needs should consider the current use and efficiency of resources to better plan for tomorrow.

The indicators and associated definitions and methodologies in ISO 37120 have been developed in order to help cities:

a) measure the performance management of city services and quality of life over time;

b) build high caliber city-level data sets across cities and city departments;

c) exchange knowledge and best practices with peers globally through comparison across a wide range of performance measures;

© ISO 2024 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 37124:2024