NAMS 37105:2026
First Edition 31 July 2026
ISO 37105:2019
First Edition 2019-11

NAMIBIAN STANDARD

NAMS 37105:2026 – Sustainable cities and communities — Descriptive framework for cities and communities

This Namibian standard is the identical implementation of ISO 37105:2022 and is adopted with the permission of the International Organization for Standardization

Published by the Namibian Standards Institution (NSI)
Established by section 2 of the Standards Act, 2005 (Act No 18 of 2005)
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ISO 37105:2019
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National Foreword

This NAMS 37105:2026 is identical with (*the first edition of* ISO 37105:2022 - Sustainable cities and communities — Descriptive framework for cities and communities. The Namibian Standards Institution Technical Committee responsible for the adoption of this International Standard is Technical Committee 2 on Quality Management and Quality Assurance.

No amendments, omission and additions have been made to the original ISO International Standard.

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

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INTERNATIONAL STANDARD

ISO 37105

First edition
2019-11

Sustainable cities and communities — Descriptive framework for cities and communities

Développement durable des collectivités — Cadre descriptif pour les villes et les collectivités

Reference number
ISO 37105:2019(E)

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Published in Switzerland

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Introduction

The descriptive framework for cities and communities detailed in this document helps city and community stakeholders define a common language to describe cities and communities. This framework can facilitate the sharing of ideas, data and solutions within, and also between, cities. The descriptive framework, which can also be referred to as the city anatomy, serves as a basic blueprint to facilitate the integration of operating systems and services within a city or community[4],[5]. Ultimately, the descriptive framework can be the basis of a formal ontology, or knowledge model, which can be useful for helping to plan and implement city operating solutions, particularly those that might require digital machine-readable information.

A city or community is a system of systems and interactions that foster and are fostered by emergent human behaviour[6]. It can be seen as an arrangement of, and set of relationships between, the multiple layers of a permanent human settlement, with an administrative and legal status supported by laws and generally recognized throughout the world. Rather than being static, discreet entities, cities or communities often have porous and sometimes ambiguous borders (politically, economically, environmentally and socially) and can thus often be difficult to describe. The structure, interactions and societal aspects of a city or community are also integral parts of all wider systems extending beyond the city borders. However, more than half the world's population now lives in cities or communities and many of humanity's chronic challenges are faced in cities or communities. A common descriptive framework for cities or communities is a useful tool to assist them in sharing knowledge and finding solutions to issues common to cities or communities all over the world.

Solutions to the issues cities face are intended to improve the quality of life for all city citizens and follow sustainable development principles. These principles dictate that the solutions to city issues implemented today do not compromise the ability of future generations to meet their own needs. The United Nations Sustainable Development Goals (UNSDG) issued in 2015 resolve this relatively abstract ideal into more tangible objectives. The UNSDG Goal 11[7] provides these objectives for cities, creating 10 targets for improving the quality of life for citizens and the city's resiliency, while also limiting the impact of human activity on the environment. Tools such as ISO standards, for example ISO 37101 and ISO 37120, help cities plan for, monitor and reach these objectives. The purpose of this document is to provide a common language for the description of cities that will enable those goals and support the sharing of city solutions.

The descriptive framework is based on work by the City Protocol Society. It uses an analogy to human anatomy and its dynamic physiology to describe any city or community, of any size, in a manner that is timeless, culturally agnostic, scalable and generic. The descriptive framework categorizes the components of the city into three major elemental systems: a set of physical structures (structure), the living entities that create a city's society (society) and the flow of interactions between them (interactions). These elemental systems are further resolved into, or described by, layers that capture all the activities of importance to a city, both within and outside the city boundaries, as well as all the natural and built domain components within a city.

ISO 37100 contains a list of relevant terms and definitions which are also useful in understanding the descriptive framework.

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Sustainable cities and communities — Descriptive framework for cities and communities

1 Scope

This document specifies a descriptive framework for a city including an associated foundational ontology of the anatomical structure of a city or community. The descriptive framework is intended to have the following qualities:

— *timeless*, i.e. compatible with any human settlement at any time in history;

— *acultural*, i.e. valid for any culture and any type of city;

— *scalable*, i.e. valid for a metropolis, a city, a small town or a village;

— *generic*, so that everything we could define as a "human settlement", such as a "smart city", has a place in this structure.

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 37100, *Sustainable cities and communities — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 37100 and the following apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
descriptive framework
logical structure that describes how the key entities within a specific domain can be classified so as to show their relationship with each other

Note 1 to entry: "Entities" refers not only to tangible things, but also to anything important that has a separate and distinct existence, for instance elemental conventions, principles, practices, strategies, policies, decision-making structures and accountabilities.

3.2
ontology
specification of concrete or abstract things, and the relationships among them, in a prescribed domain of knowledge

[SOURCE: ISO/IEC TR 19763-9:2015, 3.1.3, modified — Note removed.]

3.3
urbanism
urban life and environment

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