International Standard

ISO 37176

First edition
2024-08

Smart community infrastructure — Responsiveness assessment and maturity model

Infrastructures urbaines intelligentes — Evaluation de la conformité et modèle de maturité

COPYRIGHT PROTECTED DOCUMENT

Contents

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,* Subcommittee SC 1, *Smart community infrastructures.*

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.

Introduction

Residents play the leading role in the long-term development of communities. With the rapid development of information technology (IT), the satisfaction of individuals' needs matters most in the long-term development of communities. Only when the needs of residents are fully and rapidly met can people's quality of life be truly improved. For such a process, the rapid response from the community to the residents is an essential component to measure the residents' satisfaction with the community, which makes new demands on the responsiveness of the community infrastructure.

ISO 37153 describes a community infrastructure maturity model (CIMM) and a standardized approach for the assessment and improvement using the CIMM. However, ISO 37153 assesses the community infrastructure, which does not focus on the importance of the interaction between residents and community. At the same time, responsiveness is an important quality of community infrastructure, which has not been focused on in existing standards.

This document describes a maturity assessment model for the responsiveness of community infrastructure to measure whether the localised infrastructure is sufficiently adaptable to support changing needs. The maturity assessment model takes into consideration the assessment domain and assessment categories to evaluate the responsiveness of the community infrastructure. In this way, the degree of community responsiveness can be known and used to promote the building of a more responsive community. The community can make a rapid response to the residents' needs by the agile responsiveness of the community infrastructure. The essence of achieving the responsiveness of the community is to enhance the interaction between the residents and the community.

Smart community infrastructure — Responsiveness assessment and maturity model

1 Scope

This document describes a maturity assessment model to evaluate the degree of responsiveness of the smart community infrastructure with different maturity levels.

This document provides the assessment domain (e.g. governance infrastructure, health infrastructure), categories (e.g. availability, affordability, safety and security, quality of service), and the criteria of maturity levels to assess the responsiveness to promote the interaction between the residents and the community by satisfying residents' needs.

This document:

— clarifies the assessment domain associated with residents' needs in the community;

— provides users with standardized assessment categories to measure the degree of responsiveness of the smart community infrastructure.

This document is intended to be used by providers and operators of community infrastructure, community planners and government decision-makers.

This document applies to all types of communities, regardless of their geographical location and size.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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/

3.1
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 is a type of community.

[SOURCE: ISO 37100:2016, 3.2.2]

3.2
responsive community infrastructure
community infrastructure that is built for making rapid and effective responses to residents' increasingly diversified needs

3.3
maturity model
model derived from one or more specified process assessment model(s) that identifies the process sets associated with the levels in a specified scale of organizational process maturity

Note 1 to entry: The maturity model for the VSE profiles is defined in ISO/IEC/TR 29110-3-1:2015, Annex A.

[SOURCE: ISO/IEC 33001:2015, 3.3.7, modified — Note 1 to entry has been added]

3.4
community infrastructure maturity model
CIMM
maturity model applied to community infrastructure, which defines maturity levels in order to assess the level of maturity of community infrastructure

[SOURCE: ISO 37153:2024, 3.5]

3.5
process
series of actions or events taking place in a defined manner leading to the accomplishment of an expected result

Note 1 to entry: "Defined" in this context does not necessarily mean documented. A defined process includes, but is not limited to, adaptive means.

[SOURCE: ISO/IEC 15944-1:2011, 3.53, modified — Note 1 to entry has been added]

4   Framework

Users include people or citizens of the community and industry or enterprises. People or citizens of the community are one of the major users of community infrastructures. Industries or enterprises which have or plan to have activities in the community are another major type of users of community infrastructures. Therefore, their perspectives are essential to identify community infrastructure performance metrics. Users should follow a concrete process to assess the maturity of the community infrastructure. Faced with residents' various needs, the requirements for community infrastructure are growing. The community infrastructure should be equipped with responsive characteristics to make a rapid and effective response to residents. Therefore, the inherent characteristics are utilized to assess the responsiveness maturity of the community infrastructure. Five different levels which represent different responsiveness levels are assigned to community infrastructure. Figure 1 shows the whole process of the maturity model.
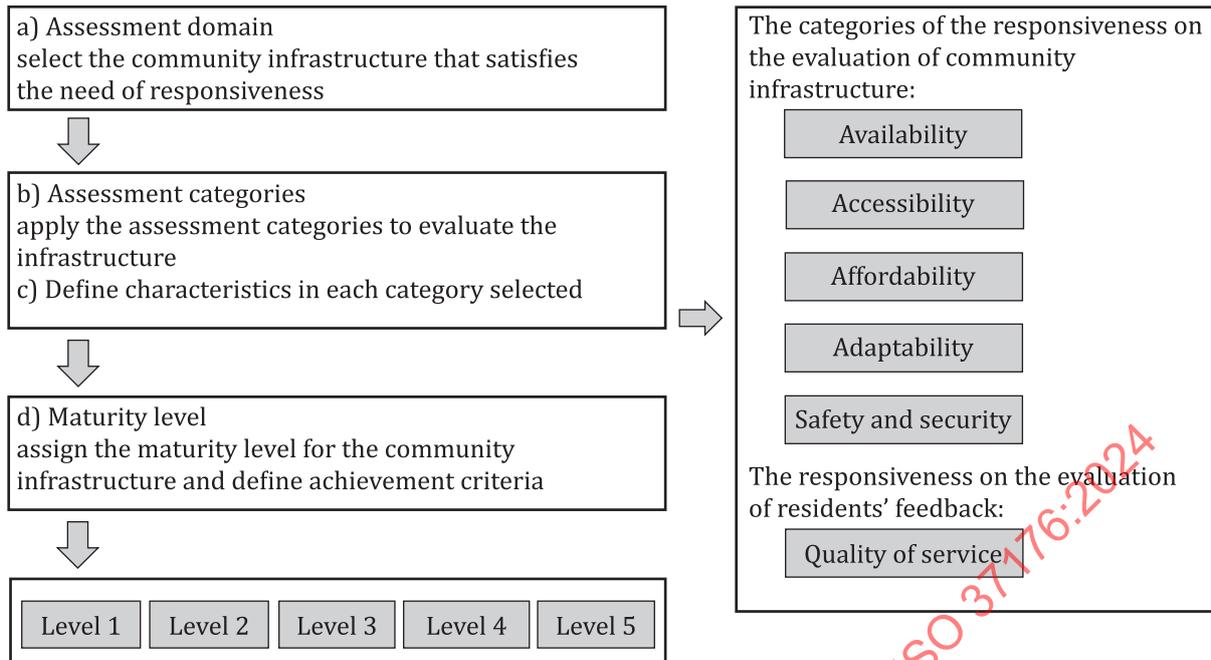
Figure 1 — Framework of the responsiveness assessment and maturity model for community infrastructure

5 Assessment categories

5.1 General

Users should follow the concrete assessment categories to measure the maturity level of the community infrastructure, and the descriptions of each category are essential.

To assess the responsiveness of the community infrastructure by assessment categories, users should:

— comprehensively consider seven categories of the community infrastructure, including the availability, accessibility, affordability, the safety and security, the quality of service and adaptability;

— evaluate the responsiveness of the community infrastructure by assessing these seven categories on each community infrastructure.

5.2 Definition of the assessment categories

Assessment categories refer to concrete indicators that are used to comprehensively measure the responsiveness of the community infrastructure. Users should define five assessment categories of the maturity model for each assessment domain on its attribute. Each requirement for the community infrastructure can be divided into six categories to measure the responsiveness of the community infrastructure.

The assessment categories for each assessment domain are shown in Table 1.

Table 1 — Assessment categories for each assessment domain in maturity model

Domain	Categories	Relevant supporting documents
Governance infra-structure	Availability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of governance. — ISO 37151 provides guidance on evaluating the availability for residents, including temporal coverage, area coverage, population coverage and stability.
	Accessibility	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of governance. — ISO 37151 provides guidance on evaluating the capability of being accessed and used by a wide range of people.
	Affordability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of governance. — ISO 37151 provides guidance on evaluating the cost of the infra-structure on governance.
	Safety and security	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of governance. — ISO 37151 provides guidance on evaluating the safety, cyber security and data privacy, and physical security.
	Quality of service	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of governance. — ISO 37151 provides guidance on evaluating the service capacity, easy procedures to understand and use, proper invoicing, community infrastructure-specific qualities and the provision of information.
	Adaptability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of governance. — ISO 20887 provides guidance on evaluating the capability of adapting to changing needs.
Health infrastructure	Availability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of health. — ISO 37151 provides guidance on evaluating the availability for residents, including temporal coverage, area coverage, population coverage and stability.
	Accessibility	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of health. — ISO 37151 provides guidance on evaluating the capability of being accessed and used by a wide range of people.
	Affordability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of health. — ISO 37151 provides guidance on evaluating the cost on the infra-structure on health.
	Safety and security	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of health. — ISO 37151 provides guidance on evaluating the safety, cyber security and data privacy, and physical security.
	Quality of service	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of health. — ISO 37151 provides guidance on evaluating the service capacity, easy procedure to understand and use, proper invoicing, community infrastructure-specific qualities and provision of information.
	Adaptability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of health. — ISO 20887 provides guidance on evaluating the capability of adapting to changing needs.

NOTE The categories of availability, accessibility, affordability, safety and security, and quality of service refer to ISO 37151. The category of adaptability refers to ISO 20887.

Table 1 *(continued)*

Domain	Categories	Relevant supporting documents
Safety infrastructure	Availability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of safety. — ISO 37151 provides guidance on evaluating the availability for residents, including temporal coverage, area coverage, population coverage and stability.
	Accessibility	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of safety. — ISO 37151 provides guidance on evaluating the capability of being accessed and used by a wide range of people.
	Affordability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of safety. — ISO 37151 provides guidance on evaluating the service price.
	Safety and security	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of safety. — ISO 37151 provides guidance on evaluating the safety, cyber security and data privacy, and physical security.
	Quality of service	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of safety. — ISO 37151 provides guidance on evaluating the service capacity, easy procedure to understand and use, proper invoicing, community infrastructure-specific qualities, and provision of information.
	Adaptability	—ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of safety. — ISO 20887 provides guidance on evaluating the capability of adapting to changing needs.
Transportation infra-structure	Availability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of transportation. — ISO 37151 provides guidance on evaluating the availability for residents, including temporal coverage, area coverage, population coverage and stability.
	Accessibility	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of transportation. — ISO 37151 provides guidance on evaluating the capability of being accessed and used by a wide range of people.
	Affordability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of transportation. — ISO 37151 provides guidance on evaluating the service price.
	Safety and security	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of transportation. — ISO 37151 provides guidance on evaluating the safety, cyber security and data privacy, and physical security.
	Quality of service	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of transportation. — ISO 37151 provides guidance on evaluating the service capacity, easy procedure to understand and use, proper invoicing, community infrastructure-specific qualities and provision of information.
	Adaptability	— ISO 37120, ISO 37122 and ISO 37123 provide guidance on how to evaluate the indicators of transportation. — ISO 20887 provides guidance on evaluating the capability of adapting to changing needs.
NOTE The categories of availability, accessibility, affordability, safety and security, and quality of service refer to ISO 37151. The category of adaptability refers to ISO 20887.		

5.3 Performance characteristics

The responsiveness maturity level of the community infrastructure should be defined according to the characteristics of the comprehensive performance.

Comprehensive performance characteristics of the community infrastructure include:

— The availability of the community infrastructure. Community infrastructures are available for anyone who lives in the resident area no matter their distance to the community infrastructures.

— The accessibility of the community infrastructure. Accessibility measures whether residents, including the older people and the persons with disability in the same community, can have access to the community infrastructure, and share the community infrastructure in common.

— The affordability of the community infrastructure. The balance between the cost and the responsiveness of the community infrastructure should be noted when assessing the maturity of the community infrastructure.

— The safety and security of the community infrastructure. The needs for safety and security are basic for the responsive community infrastructure.

— The quality of service of the community infrastructure. The quality of service measures the residents' feedback to the community infrastructure.

— The adaptability of the community infrastructure. The adaptability measures the community infrastructure to adapt to changing community needs.

NOTE   The indicators above are measurable either quantitatively or qualitatively.

6 Assessment domain

6.1 Governance infrastructure

6.1.1 General

Governance infrastructure is established for public use to satisfy residents' common needs in the community. Governance infrastructure is directed by community leadership having the authority and responsibility for pursuing the community's objectives. Governance infrastructure is essential for residents to handle their common needs. It is an inevitable requirement to promote the modernization of governance infrastructure. The implementation of governance infrastructure is to use the technologies including cloud computing, artificial intelligence (AI), data mining and knowledge management. This improves the intellectual level of government in office, supervision, service, and decision-making, as well as to promote government to provide efficient, responsive and convenient service for the residents.

6.1.2 Considerations in maturity model

To apply the concept of standardization to governance infrastructure, this document establishes a standardized system framework based on the general basis of data exchange and sharing, which are supported by service provision and service management. Through standardized means, the government information process is standardized, and finally, a new government service mode of diversified service channels, comprehensive information disclosure, quick and intelligent retrieval, and specialized individual service is realized.

The community governance infrastructures include:

— fire and paramedics department;

— public works, i.e. roads and traffic;

— sanitation infrastructure including water and sewers;

— public safety, e.g. police;

— storm water drainage system;

— waste collection and disposal.

6.1.3 Performance characteristics

To assess the responsiveness maturity of the governance infrastructure which is provided by the community, several assessment categories shall be employed for example:

— Availability, which indicates that the governance infrastructure should be available for residents. It refers to the available hours of the governance infrastructure services, the extent to which the governance infrastructures physically cover the area of the community, the proportion of the population of the community that is served by the governance infrastructure, and the extent to which the governance infrastructures operate without interruption.

— Accessibility, which measures the capability of the governance infrastructure being accessed and used by a wide range of people.

— Affordability, which measures the investment cost of the governance infrastructure construction, including the labour, material and financial resources consumed in the process of equipping the community with governance infrastructure.

— Safety and security, which measures the information privacy security of residents.

— Quality of service, which measures the residents' satisfaction on the governance infrastructure equipped by the community. It is collected from the investigate or survey to obtain this information.

— Adaptability, which measures the ability of the governance infrastructure to adapt to changing needs.

6.1.4 Data sources

The data item information required in 6.1.3 shall be sourced from community authority who is responsible for constructing governance-related infrastructures.

6.2 Health infrastructure

6.2.1 General

Community health infrastructure is an important part of residents' daily life. Through IT, health infrastructure and health work are integrated. With the medical cloud data centre as the core, it crosses the time and space limitations of the original medical system. With intelligent decision-making on health infrastructure, the optimal medical service system which can provide residents with more efficient health infrastructure can be achieved. The purpose of this document is to evaluate the responsiveness of the current community health service to encourage the community to provide a faster and more responsive community health infrastructure for residents.

6.2.2 Considerations in maturity model

The responsiveness of the community on health infrastructure requires the community to provide residents with timely, high-quality medical treatment with the help of IT on medical systems. The health needs of all residents including women, children, the elderly, and chronic patients should be well supported. Especially for families experiencing challenges and some special groups, timely health service is important, which requires the community to pay attention to these residents and provide a prompt emergency response.

The health infrastructure involved in the responsiveness of infrastructure includes:

— air and water quality alert systems;

— community health records;

— community hospitals and clinics;

— family doctors for physical and mental examination, and health management;

— health care facilities including providers such as pharmacies, physiotherapy and imaging clinics.

6.2.3 Performance characteristics

To assess the responsiveness maturity of the health infrastructure, several characteristics shall be employed. The detailed performance characteristics could see the list in 6.1.3.

6.2.4 Data sources

The data item information required in 6.2.3 shall be sourced through apartment complex healthcare infrastructure providers.

6.3 Safety infrastructure

6.3.1 General

The safety infrastructure is for communities to respond to various emergent problems in time. The community adopts Internet of Things (IoT), AI and big data to implement effective response measures. Community safety infrastructure should follow the principles of people-oriented, rapid response, resource integration, and consistent power and responsibility. The infrastructure has the capability of resolving emergency problems in the shortest time and self-learning through past problems, which is the most effective method to ensure the safety of the residents.

6.3.2 Considerations in maturity model

The safety infrastructure of the community shall strengthen the preparedness and response for future hazard and public health emergencies. The pre-plan should clarify the relevant responses to the hazard including the type, the coverage area and risk level of the hazard through the sensor system. The pre-plan should specify specific measures for safety protection, and timely and accurately release disaster warning information to community residents through intelligent communication technology. The pre-plan should clarify the resident information of vulnerable groups in the community. There are corresponding relief measures for vulnerable groups in the community through big data analysis technology. Moreover, community communication channels should be included in the pre-plan, and network channels should be made clear to transmit refuge maps to residents, to ensure that residents can transfer to safe areas in the shortest time.

The community safety infrastructures include:

— emergency departments;

— fire equipment;

— natural disaster shelters;

— warning systems;

— hazard monitoring agencies;

— digital surveillance cameras;

— access control systems;

— visitor management systems.

6.3.3 Performance characteristics

To assess the responsiveness maturity of the safety infrastructure, several characteristics shall be employed. For detailed performance characteristics, see 6.1.3.

6.3.4 Data sources

The data item information required in 6.3.3 shall be sourced from apartment complexes responsible for public safety services.

6.4 Transportation infrastructure

6.4.1 General

The transportation infrastructure of the community means that the community should make a rapid response to residents' needs on transportation with the help of advanced transportation systems formed based on IT and new concepts. Comprehensive implementation of information construction, automation construction and intelligent development in the field of transportation are essential to improve the transportation service of the community.

6.4.2 Considerations in maturity model

The transportation infrastructure requires the material engineering infrastructure for social production and residents' trips to provide public services. It is a public service system used to ensure the normal life and travel of residents in the community. Its system shall consider the operation characteristics of conventional public transport and the travel needs of passengers to ensure that the stations can meet the current needs and future development needs. The public transport lines shall be opened simultaneously with the delivery and use of the allocated stations; it shall try to create a safe, comfortable and convenient traffic environment.

The transportation infrastructure involved in the responsiveness of infrastructures includes:

— public transport infrastructure (e.g. bus station, taxi station);

— public parking spaces;

— parking ETC (Earth Terminal Complex) top up system;

— barrier and barrier-free access.

6.4.3 Performance characteristics

To assess the responsiveness maturity of the transportation infrastructure, several characteristics shall be employed. For detailed performance characteristics, see 6.1.3.

6.4.4 Data sources

The data item information required in 6.4.3 shall be gathered from apartment complex transit authorities. This information may be gathered from transport system plans or other master plans.

6.5 Extended infrastructure

6.5.1 General

Extended infrastructure refers to the infrastructure that is not included in the above-mentioned infrastructures. Residents' diverse needs change over time with the developed technology, and there is a need to evaluate the extended infrastructure to adaptively meet the needs of different communities.

6.5.2 Considerations in maturity model

The type of the infrastructure should be defined and associated with residents' relevant daily lives. The infrastructure should be equipped with the responsiveness assessment under residents' increasing daily needs. The infrastructures evaluated should be specified. The list of the specific infrastructures is required.

The extended infrastructures include:

— education;

— energy;

— solid waste;

— telecommunication;

— wastewater;

— accommodation;

— traveller's centre;

— management system.

6.5.3 Performance characteristics

To assess the responsiveness maturity of the extended infrastructure, several characteristics shall be employed. The detailed performance characteristics could see the list in 6.1.3.

6.5.4 Data sources

Users should specify the data sources used for evaluating the responsiveness of the community infrastructure.

7 Maturity level

7.1 Outline

Users should define five maturity levels for each assessment domain according to the assessment categories. Depending on resident needs and the community infrastructure on governance, health, safety, and transportation, users should evaluate the responsiveness of the community according to the five assessment categories, obtaining the maturity levels of the community. The practical process of maturity assessment is listed in Annex A.

7.2 Achievement criteria table

Table 2 is an achievement criteria table of target community infrastructure(s) that comprises:

— infrastructures that should satisfy the responsiveness towards residents' daily needs;

— assessment categories to evaluate the responsiveness of the community infrastructure;

— five levels of responsiveness maturity of the community infrastructure.

Table 2 — Achievement criteria table

Domain	Assessment categories	Maturity level
IN1	Categories on IN1	Level of IN1
IN2	Categories on IN2	Level of IN2
...	...	...
IN1: The infrastructure selected to evaluate its responsiveness.		
Categories: The assessment categories established to evaluate the responsiveness of the community infrastructure.		
Level. The five levels described in 7.3.		

7.3 Maturity assessment

The maturity assessment of the responsive community infrastructure comprises:

— assessment process, which indicates the process that the community handles residents daily needs, and the maturity level depends on this process;

— assessment domain including specific infrastructures;

— assessment categories to evaluate the responsiveness of the community infrastructure;

— assessment criteria to measure the different levels of the responsiveness of the community infrastructure;

— five levels of characteristics (shown in Table 3).

Table 3 — Maturity level table

Level	Definition	Description
5	Sustainably optimizing	Residents can reach the optimized infrastructure while the community continuously evolves, and the process is responsive.
4	Improving	Residents can reach the optimized infrastructure community infrastructure, otherwise it is time-consuming.
3	Fulfilled	Residents can reach the community infrastructure needed, and the process is responsive.
2	Partially fulfilled	Residents can have access to the community infrastructure relative to their daily needs, otherwise it is time-consuming.
1	Initial	Residents may not be served with community infrastructure relative to their daily needs even though they have made a request.

Table 4 shows the whole process of the maturity model, including the assessment domain, assessment categories, and maturity level.

Table 4 — Maturity model table

Assessment domain	Assessment categories
Governance infrastructure Health infrastructure Safety infrastructure Transportation infrastructure Extended infrastructure	Availability Accessibility Affordability Safety and security Quality of service Adaptability
Five-level criteria of maturity levels	
Level	Description
5	Residents can reach the optimized infrastructure while the community continuously evolves, and the process is responsive.
4	Residents can reach the optimized infrastructure community infrastructure, otherwise it is time-consuming.
3	Residents can reach the community infrastructure needed, and the process is responsive.
2	Residents can have access to the relative community infrastructure, otherwise it is time-consuming.
1	Residents may not be served with relative community infrastructure even though they have made a request.

7.4 Assessment and improvement

7.4.1 General

This clause assesses the maturity of the responsive community infrastructure by the assessment table and gives guidance on how to improve the responsiveness of the community infrastructure.

7.4.2 Assessment

The following three steps can be used as a reference to assess the responsiveness maturity of the community infrastructure. Among these three steps, the targeted context or scenario shall be reviewed by the user and therefore provide necessary adjustment to the original assessment table:

— select the target community infrastructure;

— use the maturity assessment table to assess;

— obtain the assessment result of the target community infrastructure.

7.4.3 Improvement

According to the assessment result, users can promote the responsiveness construction to improve the responsiveness of the community infrastructure. During the responsiveness construction process, sustainable development by intaking the resource consumption level should be taken into consideration as well. From the assessment result of each assessment domain, the community can compare the different responsiveness maturity and improve their weaknesses.

Annex A
(informative)

Examples of responsiveness assessment for community infrastructure

A.1   Hefei Heyedi community, China

A.1.1   Characteristics

Heyedi Street in Shushan District, Hefei City, China, was established in April 2004. It stands to the east of Hefei's government and cultural hub. The community is a market town encircled by rivers and ponds, and is especially known for lotus farming. The district encompasses 6,21 km^2 and governs six communities: Jinhe, Repulse Bay, Triumphal Arch, Hongsifang, Jiaheyua and lvyiju. Within these neighbourhoods reside approximately 51 000 registered residents.

By promoting the integration, in-depth analysis and application of cross-departmental data resources, the platform:

— leverages the value of data to its fullest potential;

— strengthens the ability of social management and visual dispatching command;

— improves the supporting intelligent application around the three fields of city management, command dispatch and people's livelihood services;

— focuses on the ability of social governance and command dispatch;

— improves the overall operation management and service level for the people of the whole region.

A.1.2   Platforms

Heyedi Street has embraced the approach of "Two Platforms and One Centre". By harnessing the district-level government cloud resource platform, the community has implemented a digital grid management platform alongside a sub-command centre, enabling the integration of data. This project involves aggregating and analysing personnel, spatial and material information from the street community, fostering intelligent data management and efficient resource allocation.

Interconnectedness, mutual exchange and collaborative governance are at the core of this initiative. The platform integrates with the district government's information-sharing platform, facilitating the sharing of over 100 000 crucial data points. Through connections with systems like "Intelligent Life Circle" and "Hefei Tong", it supports functionalities such as event processing and facial recognition, enhancing overall information exchange capabilities. Furthermore, coordination with the street's sub-command centre ensures coordinated operations and unified response strategies in times of emergencies.