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Smart city use case collection and analysis - Managing public health emergencies in smart cities -
Part 1: High level analysis

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Smart city use case collection and analysis – Managing public health emergencies in smart cities - Part 1: High level analysis

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INTRODUCTION

Smart cities are a key trend of urban development in the new information age, and an effective way to ensure that cities are built and managed in a way that best supports the needs of their residents. The major international standardization organizations are vigorously promoting the research and development of standards. However, the Covid 19 pandemic has demonstrated that there are few relevant international standards that provide guidance for the smart city to respond to public health emergencies, as well as a lack of unified understanding and systematic review, and clear direction for the development of such standards, which affects the development and application of international standards for smart city public health emergency (PHE).

In response to the above issues, this document: "Use case collection and analysis – Management of public health emergencies in smart cities" has been developed to collect relevant use cases in important scenarios of smart city management under public health emergencies in order to enable national and international standards development organizations develop a comprehensive portfolio of standards to help cities be well prepared for any future public health emergency.

1 Scope

This part of IEC 63347 describes and analyses a comprehensive set of high-level scenarios of how smart cities can best respond to public health emergencies, and strengthen their "urban immune system", using evidence from as many countries as possible. It covers use cases related to the prevention, the control and the successful ending of public health emergencies, and to dealing with the longer-term harm that these can cause. It considers a wide range of different scenarios and reviews both the management challenges and the range of technology solutions, including the use of IoT, telecommunications, AI, big data, and cloud computing, available in each of them, in order to provide a comprehensive outline of the standardization requirements to develop an effective urban immune system.

The public health emergencies envisaged are those relating to pandemics resulting from novel forms of disease, for which there is no natural immunity within the population and no tried and tested treatment. However, some of its provisions will be helpful to dealing with pandemics of existing diseases such as typhoid and cholera brought on through natural disasters or war.

This document will provide useful information to international and national standards development organizations and thus facilitate and promote the development of the smart city standards required. Annex A gives a use case database collection and descriptions.

2 Normative references

There are no normative references in this document.