ISO/TR 37112:2024-03 (E)

Sustainable cities and communities - Case studies in how smart city operating models support an effective public-health emergency response

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

3.1 General 1

3.2 Public-health emergencies 2

4 Case study framework — Smart city approaches to management of COVID-19 ..... **2**

5 Good practice cases across all phases of the ISO 22320 command-and-control process for emergency management **4**

5.1 General 4

5.2 PUTRAJAYA — Observation, information gathering, processing, and sharing 4

5.2.1 Overview — Using the city command centre to provide integrated data sensing and sharing across all agencies involved in COVID-19 management 4

5.2.2 Objectives of the initiative 5

5.2.3 What was achieved 5

5.2.4 How the project applied ISO 37106 guiding principles 6

5.2.5 Lessons learned 6

5.3 New York — Assessment of the situation, including forecasts 7

5.3.1 Overview — Use of precision spatial data to support COVID-19 operations 7

5.3.2 Objectives of the initiative 7

5.3.3 What was achieved 8

5.3.4 How the project applied ISO 37106 guiding principles 9

5.3.5 Lessons learned 9

5.4 China-Singapore Tianjin Eco-city (CSTEC) — Planning 10

5.4.1 Overview — Pandemic management map to plan COVID-19 management 10

5.4.2 Overview of the objectives 11

5.4.3 What was achieved 11

5.4.4 How the project applied ISO 37106 guiding principles 15

5.4.5 Lessons learned 16

5.5 Cities in Scotland — Decision-making and communication 17

5.5.1 Overview — Building on Scotland's smart city ambitions to connect with and engage residents during the pandemic 17

5.5.2 Objectives of Scottish inter-city collaboration during the pandemic 17

5.5.3 What was achieved 17

5.5.4 How the project applied ISO 37106 guiding principles 18

5.5.5 Lessons learned 19

5.6 Wuhan — Implementation of decisions 20

5.6.1 Overview — Ten-day construction of smart emergency hospital to prevent COVID-19 20

5.6.2 Overview of the objectives 21

5.6.3 What was achieved 21

5.6.4 How the project applied ISO 37106 guiding principles 22

5.6.5 Lessons learned 23

5.7 Hangzhou — Feedback gathering and control measures 23

5.7.1 Overview — Health code in the city management to prevent COVID-19 23

5.7.2 Overview of the objectives 23

5.7.3 What was achieved 24
5.7.4 How the project applied ISO 37106 guiding principles 25
5.7.5 Lessons learned 27

6 Key themes and preliminary conclusions 28
6.1 Key themes 28
6.2 Preliminary conclusions 29

Bibliography 31