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City resilience — Guide

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Summary of pages

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 March 2019. It was prepared by Subcommittee SSM/1/7, *City resilience*, under the authority of Technical Committee SSM/1, *Societal security management*. A list of organizations represented on these committees can be obtained on request to their secretary.

Information about this document

The URLs referenced in this document were accessed on 7 March 2019.

Use of this document

As a guide, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification or a code of practice and claims of compliance cannot be made to it.

Presentational conventions

The guidance in this standard is presented in roman (i.e. upright) type. Any recommendations are expressed in sentences in which the principal auxiliary verb is “should”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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

0 Introduction

Cities are the social and spatial framework for most people's lives. This concentration of people, infrastructure, businesses and institutions creates a focal point for risks and opportunities. When shocks occur, they disrupt the continuity of services that most people take for granted. Severe shock events tend to be uneven in their impact, hitting the most disadvantaged and vulnerable hardest, imposing human and economic cost, hampering growth and curbing opportunities.

We are living in an increasingly dynamic and changing world. For example, climate change is associated with an increased frequency and severity of extreme weather, and high summer temperatures can tip into periods of acute and lethal heat stress. These can be further exacerbated by energy and transport disruptions, raising social tensions. Large regional inequalities exacerbate shocks. However, long-term stresses can also be a source of advantage. For example, technological change, if exploited correctly, can bring new industries and prosperity to cities.

Cities are increasingly complex places that demand an ever more proactive and integrated approach to resilience which transcends departmental and organizational boundaries and embraces a comprehensive understanding and evidence base.

Traditionally, resilience has been addressed through managing relatively short-term, acute risks through security and emergency response and recovery. However, this foundation needs to be built upon with a broader, proactive approach that enables cities not just to survive but to thrive.

City resilience describes the capacity to manage shocks and continue through disruption in the short term, and to adapt to stresses and realize opportunities that present themselves in the longer term. More resilient cities are better able to realize their strategic ambitions through protecting their critical resources, creating and sustaining opportunities for enterprise, and empowering individuals, communities and places to adapt and prosper.

City resilience is vital for protecting, sustaining and enhancing economic, social, physical and environmental value.

A comprehensive approach to city resilience can provide a common platform and shared understanding for adapting to a dynamic environment, empowering local government, businesses, service providers, citizens and communities around a common goal. This requires a broad view of issues, from healthcare and education through to community cohesion and security. It addresses shocks, such as flooding and terrorism, through to stresses such as air quality and demographic change.

Resilience is the responsibility of everyone, not just the city authorities. Citizens and organizations, communities and businesses that are aware and empowered to act can enhance a city's resilience.

A highly resilient city has the **hindsight** to learn from the past and to recognize its strengths, weaknesses, values and direction; the **insight** to know what can and cannot be controlled right now; and the **foresight** to anticipate and adapt such that it avoids or addresses future disruptions and change, and exploits the opportunities to maximize value and prosperity.

A highly resilient city also possesses the following fundamental characteristics, each of which delivers benefits:

- **Inclusive:** provides a high quality of life for all its citizens, builds community cohesion and empowers people and communities to play an active role in their future: communities, institutions and business agree a vision for the city's future, and are aware of the shock and stress risks the city faces and their respective and complementary roles in protecting and developing the city into the future;

- **Adaptive:** flexibility is designed into the city's systems so that it can understand and adapt to the rapid pace of change to be fit for the future, and develop the agility to make decisions quickly and act to manage risks and seize opportunities;
 - **Reflective:** has a deep and comprehensive understanding of the city systems and risks, allowing resources to be prioritized to provide maximum benefit, and applies shared knowledge and learning to innovative and improve continuously;
 - **Durable:** is prepared and robust against identified shocks and stresses, reducing the social and economic impacts and attracting investment from people and businesses, thereby increasing productivity and competitiveness and allowing the city to thrive, not just survive; and
 - **Integrated:** working across sectoral boundaries to achieve gains in efficiency and effectiveness, for example by initiatives that address more than one issue or realize multiple gains, e.g. green infrastructure development can mitigate flood mitigation risk and heat stress, support biodiversity and sustainable transport, and contribute to community regeneration.
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1 Scope

This British Standard provides practical guidance and tools for increasing city resilience. It is intended for use by all stakeholders who contribute to city resilience: citizens, organizations, communities, government and business. The guidance is also relevant to towns or a wider area, such as that covered by a local enterprise partnership (LEP).

This British Standard builds on the growing portfolio of guidance on this evolving subject from initiatives such as the UNISDR ten essentials [1] and the 100 Resilient Cities [2] programme (pioneered by the Rockefeller Foundation), and lessons learned from cities. It defines key concepts and terms, and sets out a general framework (see [Clause 5](#) and [Figure 2](#)) that assists the prioritization, integration and development of local strategies and plans, to increase a city's resilience. The guidance is intended to support the following activities:

- a) engage and motivate city, community and business leaders to address resilience and provide the necessary conditions for success;
 - b) improve a city's understanding of resilience challenges over the short, medium and long term;
 - c) support and build deeper, broader and more integrated capacity in the city; and
 - d) prioritize and strengthen investment decisions.
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2 Normative references

There are no normative references within this British Standard.

3 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

3.1 city resilience

capacity of individuals, communities, institutions, businesses and systems within a city to survive, adapt and prosper in the face of shocks and longer term stresses

3.2 disruption

deviation from expected performance in any aspect of a city caused by a shock or stress