

Smart cities and communities Kitemark certification

For a more resilient, connected and sustainable world



The urban environment is being transformed

Today, 55% of the world's population lives in urban areas, a proportion that is forecast to increase to 68% by 2050*.

This is putting immense pressure on our urban environments. Transportation, energy, housing and the use of resources need to be effectively managed to enable sustainable development.

Meanwhile a technological revolution is taking place. Digitization, the installation of 5G networks, increased connectivity and the Internet of Things (IoT) provide the perfect opportunity for cities and communities to become

smarter and deliver a better environment in which to work and live.

"There is no better way to improve the lives of billions of people around the world than to improve the way cities work." Michael Bloomberg, former mayor of New York City

In response investment in smart cities and communities is accelerating globally.

(*The UN, Department of Economic and Social Affairs 2018)

What makes a truly smart city or community?

ISO 37106* is the international standard for sustainable cities and communities. It's a framework to build smart city operating models for sustainable communities. The standard defines a smart city as:

"One that dramatically increases the pace at which it improves its sustainability and resilience... by fundamentally improving how it engages society, how it applies collaborative leadership methods, how it works across disciplines and city systems, and how it uses data and integrated technologies... in order to transform services and quality of life to those in and involved with the city (residents, businesses, visitors)."

Internationally the common vision is to improve city living and working by harnessing the power of technology.

- In China smart city initiatives are included in the 13th national five-year plan with numerous smart city clusters along the Yangtze River Delta and Pearl River Delta
- In Austria Vienna's smart city strategy, "Smart City Wien" takes a holistic approach to transforming the city by 2050.

It focuses on buildings, digital, education, energy, environment, health, innovation, location, mobility, and social affairs

 In New York City the Mayor's Office of Technology and Innovation (MOTI) is leading the way in its "Building a Smart and Equitable City" initiative to deliver improvements to government services and to the lives of all New Yorkers

Yet we have only just started on the journey towards the smart city of the future. Agencies responsible for determining policy, priority areas and strategy want to know how best to plan for long-term sustainability and how best to manage issues such as security and privacy.

BSI Kitemark certification can help you to achieve this.

(*ISO 37106:2018 Sustainable cities and communities – guidance on establishing smart city operating models for sustainable communities.)

Benefits of Kitemark certification

- Improves policy making and decision making
- Increases citizen engagement
- Makes city cost savings and attracts investment
- Improves sustainability
- Creates a better quality of life for citizens
- Increases global competitiveness

"We strongly recommend Kitemark certification for sustainable and successful smart city construction and operation. This achievement will help Sejong City to provide opportunities to grow into a more mature and innovative city for our citizens."

Chae Sik, Lim – Sejong City, Korea

What BSI Kitemark certification can help you achieve

To respond to the complexities of planning for long-term sustainability whilst managing challenges of security and privacy, we've developed BSI Kitemark certification for smart cities and communities.

Based on ISO 37106, Kitemark certification supports the implementation of and measures the effective design and delivery of a smart city following a citizen-centric approach. It defines a "smart operating model" for cities which enables them to operationalize their vision, strategy and policies at a faster pace, with greater agility and a lower delivery risk.

Recognizing that no smart city or community is the same as another, Kitemark certification enables policymakers,

municipal authorities and other stakeholders to focus on their strategic priorities whilst providing a process for continual improvement through regular audits.

We will assess against the four areas of the standard and the 22 sub-clauses. An overall score of one to five is awarded with a score of three, four or five resulting in Kitemark certification.

Suitable for public, private and voluntary sectors, Kitemark certification can help cities and communities move from being silo-based to a more integrated way of operating ultimately enabling them to be smarter, more sustainable and more resilient.

The five levels of smart city and community maturity and BSI Kitemark certification:

Level 1: pre-development

No smart city or collaborative vision. Processes to meet ISO 37106 are not in place.

Level 2: developing smart city

Processes are being developed to meet ISO 37106 e.g. leadership, city vision.

Not yet ready for Kitemark certification.

Level 3: collaborative smart city

Processes are in place to meet ISO 37106 for Kitemark certification.

Level 4: leading smart city

ISO 37106 is implemented, and success is being measured.

Level 5: visionary smart city

A process of continual improvement is embedded.

Meets Kitemark certification requirements.



How to achieve Kitemark certification

- 1. Buy a copy of ISO 37106 and read it
- Book a BSI gap analysis against the Kitemark requirements
 This will help you to understand how ready you are for certification.
- Book your Kitemark assessmentWe will provide a detailed report at this stage. The length

of your assessment will depend on whether you are a small community or a large city.

4. Achieve Kitemark certification

Celebrate and promote your achievement. We will carry out regular audits designed to ensure you are making progress against your objectives.

Why BSI



Today BSI leads the way in standardization and collective best practice for smart cities creating a trusted framework to shape, share, embed and support innovation, and the safe and reliable adoption of smart cities and communities. In 2014 we published PAS 181 (Smart city framework) which today forms the basis of the international standard ISO 37106:2018. That's why we're best placed to help you understand the standard.

Working with over 84,000 clients across 193 countries, BSI is a truly international business with skills and experience across a number of sectors including automotive, aerospace, built environment, food, and healthcare. Through its expertise in Standards Development and Knowledge Solutions, Assurance and Professional Services, BSI improves business performance to help clients grow sustainably, manage risk and ultimately be more resilient.



Our products and services

Knowledge

The core of our business centres on the knowledge that we create and impart to our clients.

In the standards arena we continue to build our reputation as an expert body, bringing together experts from industry to shape standards at local, regional and international levels. In fact, BSI originally created eight of the world's top 10 management system standards.

Assurance

Independent assessment of the conformity of a process or product to a particular standard ensures that our clients perform to a high level of excellence. We train our clients in world-class implementation and auditing techniques to ensure they maximize the benefits of standards.

Compliance

To experience real, long-term benefits, our clients need to ensure ongoing compliance to a regulation, market need or standard so that it becomes an embedded habit. We provide a range of services and differentiated management tools which help facilitate this process.

Find out more Call: +852 3149 3300 Email: hk@bsigroup.com

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