



Sejong City, Korea Built Environment

BSI Smart Cities and Communities Kitemark based on ISO 37106

Company background

Sejong City in South Korea was selected as a city for a 'national smart cities pilot project' in January, 2018 by the Korean presidential committee for the fourth industrial revolution.

This project aims to improve the quality of life for citizens and to solve urban problems by the application of technologies such as Big Data, Artificial Intelligence (AI) and the Internet of Things (IoT). It also aims to establish an infrastructure for transport, safety, the environment and energy.

It is forecast that by 2030 approximately 500,000 people will live in Sejong.

ISO 37106

BS ISO 37106:2018 Sustainable cities and communities – Guidance on establishing smart city operating models for sustainable communities was created following a five-year process of research and engagement with city leaders. It defines a smart operating model for cities, which enables them to operationalize their vision, strategy and policies at a faster pace.

At the heart of this standard is the idea that cities are looking to transform the way they operate. This means moving from an inefficient, disjointed, producer-focused model to a 'smart' model: citizen-centric, digital, agile, open and collaborative.

The benefit

- Assurance and trust in Sejong City which has helped to enhance its brand internationally as a leading smart city
- Reduced risks in the process of providing city services
- A way to attract investors, businesses and people
- A defined framework to measure the continual improvement process which drive the changes to take Sejong to the next level of smart city maturity

"We strongly recommend Kitemark Smart City certification based on ISO 37106 for a 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



The challenge

- To position Sejong City as global leader in smart cities and communities
- To increase the credibility of citizens and businesses through the independent and impartial third-party assessment of the smart city operation and processes
- Under the vision 'Happy city Sejong, the new centre of Korea,' ensure its position as the practical administrative capital of Korea
- To benchmark against and forge partnerships with other cities either working towards or having achieved Smart Cities certification

Being a new city, Sejong needed a way to publicly enhance the city's reputation, brand, and image internationally in order to attract investment. It was also fundamental to the project that opportunities to grow into a more mature and innovative city were created for its citizens.

To ensure these challenges were addressed the project required close collaboration between key stakeholders including Sejong city, the Korea Land Housing Corporation (LH), including the land development, urban development and housing provision for Sejong Smart City and the National Agency for Administrative City Construction including overseeing and coordinating the construction project of Sejong Smart City.

The solution

Sejong City initially considered adopting best practice standards for Smart Cities in 2015. However, it was the publication of the new international standard for smart cities, ISO 37102, in August 2018 which was the impetus for a new BSI Kitemark certification scheme for Smart Cities to be established. This gave Sejong City the perfect opportunity to demonstrate their position as a world leading smart city as they were selected to be a pilot project for the new certification scheme.

The traditional operating model for a city has been based around functionally-oriented service providers that operate as unconnected vertical silos, which are often not built around user needs. These may include functions such as recreation, housing and transportation. Smart cities need to develop new operating models that drive innovation and collaboration across these vertical silos.

The Smart cities BSI Kitemark uses ISO 37106 as a basis to assess the maturity of Smart Cities. It measures a city's progress against four defining smart city principles; visionary, digital, citizen centric, and open & collaborative. There are 22 maturity assessment areas such as city vision, road map, citizen-centred service management, open platform, citizen's interests, etc. and each area of the city is evaluated based on 5 levels. Against this framework Sejong city have been awarded Level 3 smart city maturity level certification.

Preparation for certification started in July 2018 with audit days taking place in August and October, and the final certification awarded in November of 2018.

Choon-hee Lee, mayor of Sejong city said, "The achievement of

the smart city Kitemark means Sejong city's performance and maturity of smarty city business met the requirements of the world class level of smart cities," and "based on this success, Sejong city will keep innovating and developing to be more mature and citizen-centered so that it becomes the world leading smart city". In essence, the BSI Kitemark for Smart Cities has helped Sejong City turn a smart city vision into a reality.

Why BSI?

BSI has led the way in best practice standards for smart cities since the publication of PAS 181 – (Guide to establishing strategies for smart cities and communities) which was published in 2014.

It was this ability to demonstrate authority and influence in developing best practice standards for smart cities that made BSI the logical choice for Sejong city to work with to achieve independent and impartial certification.

And the opportunity to participate as pilot program for BSI Kitemark certification for smart cities provided the city with a timely opportunity to position itself as a global leader in this arena.

What next?

The smart city agenda is vital for the future of Sejong. Achieving smart city certification is one of the first steps in a longer term plan for Sejong City to benefit from the opportunities that will be brought about by digitalization and the Fourth Industrial Revolution.

Won-jae Lee, chief director of NAACC said, "This world's first achievement of the smart cities Kitemark in collaboration with NAACC, Sejong city, and LH is suggesting a new collaborative model of smart city business". "We will work together further with these two organizations to build an even more innovative smart city model leading the fourth industrial revolution era. "

It's also an opportunity for the city to position itself as a leader in the adoption of a smart city approach, to attract investment into the city and foster partnerships with other cities globally.

Park Sang-woo, minister of LH said, "We consider Sejong city's achievement of the smart city Kitemark as an opportunity to plan an extended application of international certification to domestic Smart City businesses " and "we will make this internationally certified Korean smarty city model into the packaged program and export it into the international market."

Looking ahead, Sejong city is looking to build on its Level 3 maturity level and drive forward their smart city strategy to build a stronger, safer, more sustainable and ultimately more resilient city.