



Examples of street lighting in selected cities



Public Procurement Principle: **Integration, Efficiency**



Procurement Stage: **Pre-tendering, Tendering**



Audience: **Procuring entity, Civil society, Policy maker, Private sector**

Description

Many cities have been investing in street lighting projects to advance their smart cities strategies:

- In 2020, the city of Tokyo, Japan, launched a new street lighting project as part of its smart city strategy to shape safer, more effective and fairer urban development. The project is developed with the NEC Corporation and will be connected to a citywide network. With the new eco-friendly infrastructure, all networked street lights can be centrally managed to save energy and optimise maintenance needs.
- In 2018, the city of Dijon, France, established a consortium to develop the first centralised and connected solution for city management of its kind in Europe. The project aims to: reduce costs significantly (e.g. by 65% on the energy bill related to street lighting); upgrade and better manage urban equipment (e.g. street lighting upgrade, planning repair and renewal); better co-ordinate services (road network maintenance and waste collection); and improve public safety (via centralised solutions for crisis management). Some of the technologies provide citizens with a smarter system of street lighting, Wi-Fi, closed-circuit television (CCTV), audio animation and smart traffic management.
- In the city of Wipperfürth, Germany, a city-wide intelligent lighting network has been installed and feeds local information to the smartphones of citizens and visitors via Bluetooth. By using a downloadable application, smartphone users can access information about local retailers, special offers, company information, directional aides and smart parking.
- The city of London and the Borough of Barking and Dagenham, United Kingdom (UK), is deploying more than 28 000 smart street lights via a platform-as-a-service solution. The platform ensures 100% coverage in the dense urban setting where cellular technology is often unavailable. The deployment of smart lighting will help to achieve energy savings goals, lead to a reduction of operational costs, improve service reliability and function as a platform for future smart applications.
- Bristol City Council, UK, has replaced the city's original street lighting with a new energy efficient solution to substantially reduce operating costs, increase safety and

create ideal driving conditions. The city has replaced 20 000 street lights, generating cost savings of GBP 1 million per year.

- In San Jose and Los Angeles, US, as well as in Barcelona, Spain, smart lighting solutions are used to provide mobile broadband connectivity. Light poles can be remotely managed and offer a Wi-Fi hotspot that improves mobile network performance across the cities.

Source: OECD (2020[4]), „Smart cities and inclusive growth: Building on on the outcomes of the 1st OECD Roundtable on Smart Cities and Inclusive Growth”, https://www.oecd.org/cfe/cities/OECD_Policy_Paper_Smart_Cities_and_Inclusive_Growth.pdf; Gelsin, A. (2017[5]), “Multiple benefits of smart street lighting solutions in smart cities”, <https://hub.beesmart.city/en/solutions/the-multiple-benefits-of-smartlighting>.

OECD (2021), Unlocking the Strategic Use of Public Procurement in Bratislava, Slovak Republic, OECD Publishing, Paris, <https://doi.org/10.1787/d616e4d9-en>.

