



You notice:

- Repeated complaints about lighting failures
- High maintenance costs
- An increase of the energy bill
- Unadapted light intensity



The Citelum solution: transversal, scalable and connected

- **Diagnosis** of the public lighting network and existing infrastructure (history, architecture, flow of population...) with a proposal of LMP (Lighting Master Plan)
- **Replacement of obsolete luminaires with LEDs** (economical, robust, modular and with a longer lifetime)
- **Remote control of the street lighting** via the MUSE® remote management platform: dimming of the intensity according to needs, event programming, real-time alerts
- **Analysis and feedback of information** (states, breakdowns, etc.) deferred or in real time for a precise identification of maintenance needs

Did you know?

The lighting represents **more than 40%** of a city's budget

The shift to new technologies lighting allows **up to 90% savings energy**

LEDs have a duration life **up to 5 times bigger** than a traditional light bulb





Smart lighting

The advantages of the solution:

- Perfectly functional upon installation, «*Plug & Play*»
- **Robust and secure**
- Use of **existing infrastructure**
- Use of an **adapted debit** to the existing bandwidth
- Can be interfaced with IoT equipment, **without the need for civil engineering**

To go further:

- Possibility of creating a **train of light** (turn on the lights by following the movement of a person or a vehicle, in order to have good visibility thanks to suitable lighting)
- Can be interfaced with **multiple protocols**: DALI, LoRa, Bluetooth, TALQ2...
- Easy integration of **new connected services** directly to the street lighting: cameras, sensors, charging stations...



BENEFITS

- Reduction of the energy bill and maintenance costs
- First step towards the development of a smart city

REFERENCES



COPENHAGEN, DENMARK

Modernization of the street lighting, remote-management with MUSE® to achieve 55% energy savings and to reduce the CO₂ emissions by 3.200 tons per year



DIJON MÉTROPOLE, FRANCE

28,750 lighting points controlled by the Citelum teams & remote management of all equipment through a CCC based on MUSE®