THE 21ST INTERNATIONAL OPERATIONS & MAINTENANCE CONFERENCE IN THE ARAB COUNTRIES

inteliLIGHT®

Interoperability The Pillar of Smart Cities

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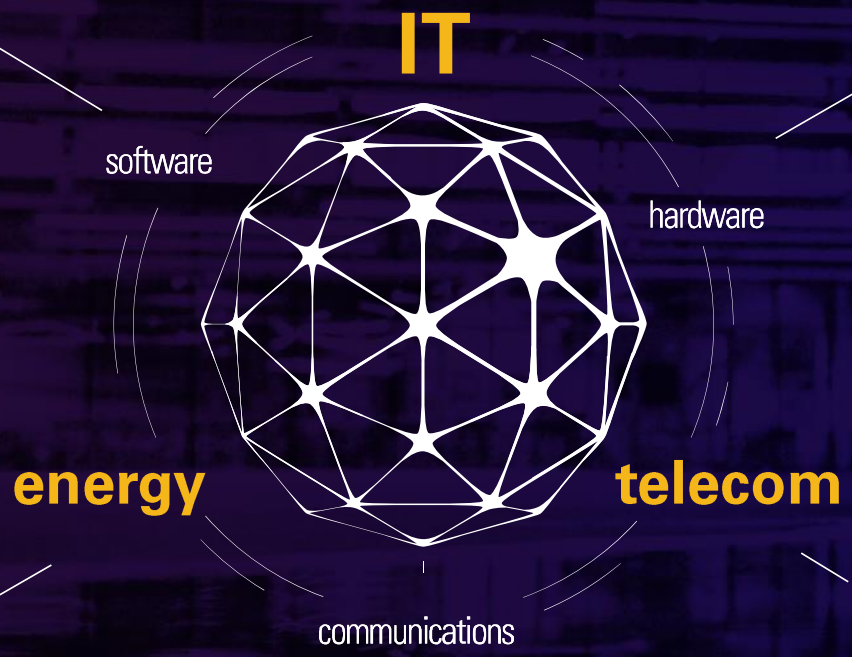


FLASHNET

We develop innovative **technology**, create unique **products** and integrate open protocol systems for smart **street lighting** and smart **cities**.

Since 2022, **Flashnet** is part of Lucy Group

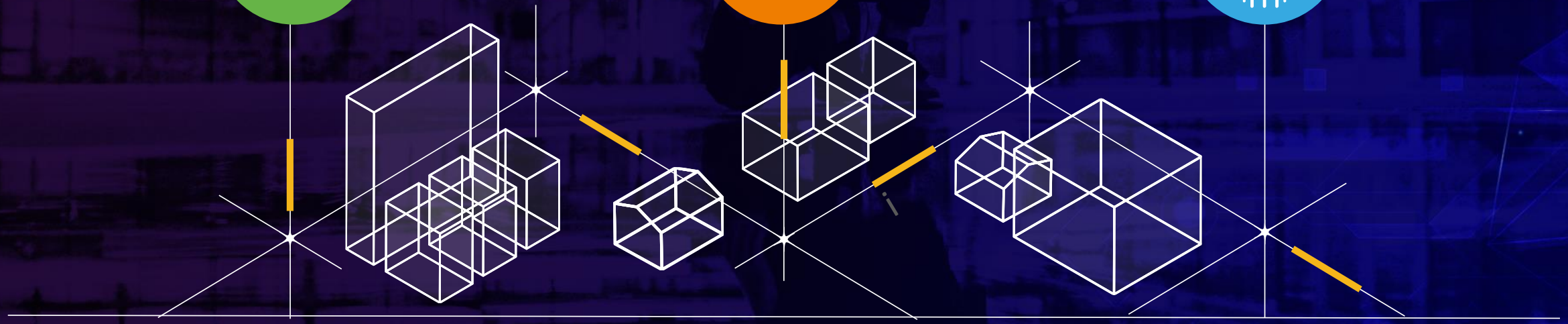
- Established in Oxford over **200 years** ago
- **Employ over 1,600 people** across 5 continents and 12 countries
- Advance the **transition to a carbon-free world**
- infrastructure that **enables renewable energy** and **smart cities**
- Long history in **street lighting controls** and **smart lighting**

urban challenges

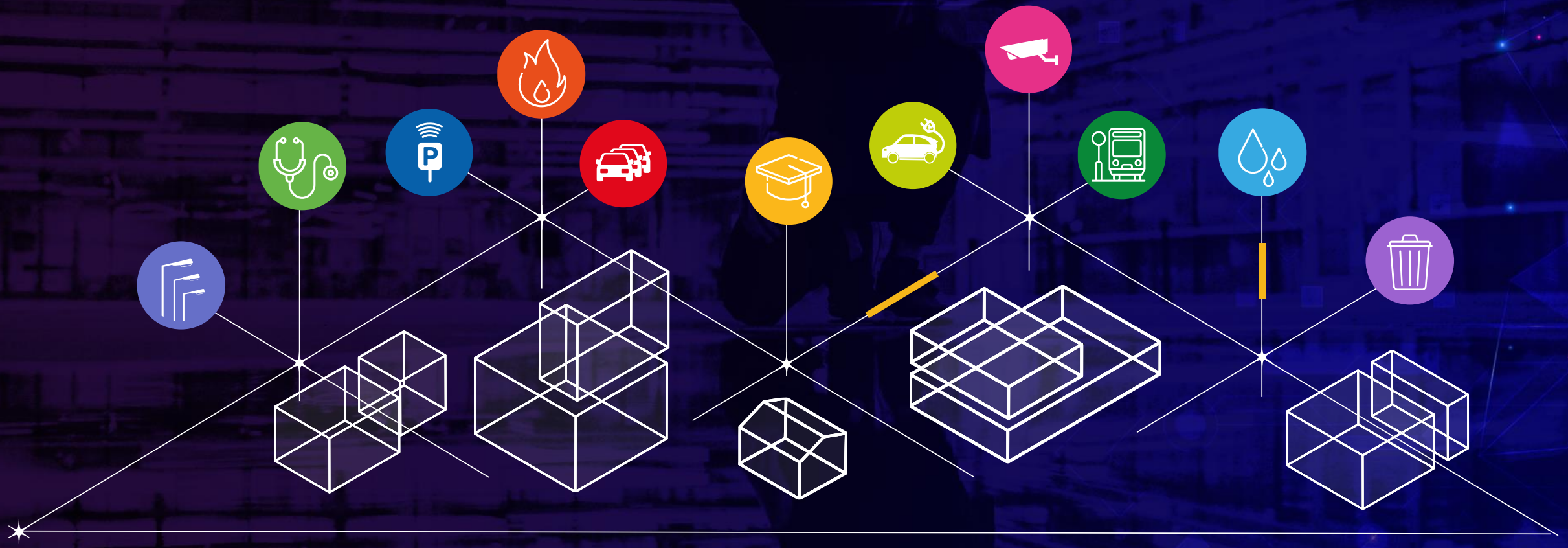
Environmental
concerns

Budget
constrains

People
expect more



IoT revolution



CONFERENCE OMAINTEC 2024 EXHIBITION

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Smart cities, **today**.

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OMAINTEC
المجلس العربي للتشغيل والصيانة
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EXICON. International Group
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What makes a city smart?

efficient services for the citizens

digital solutions

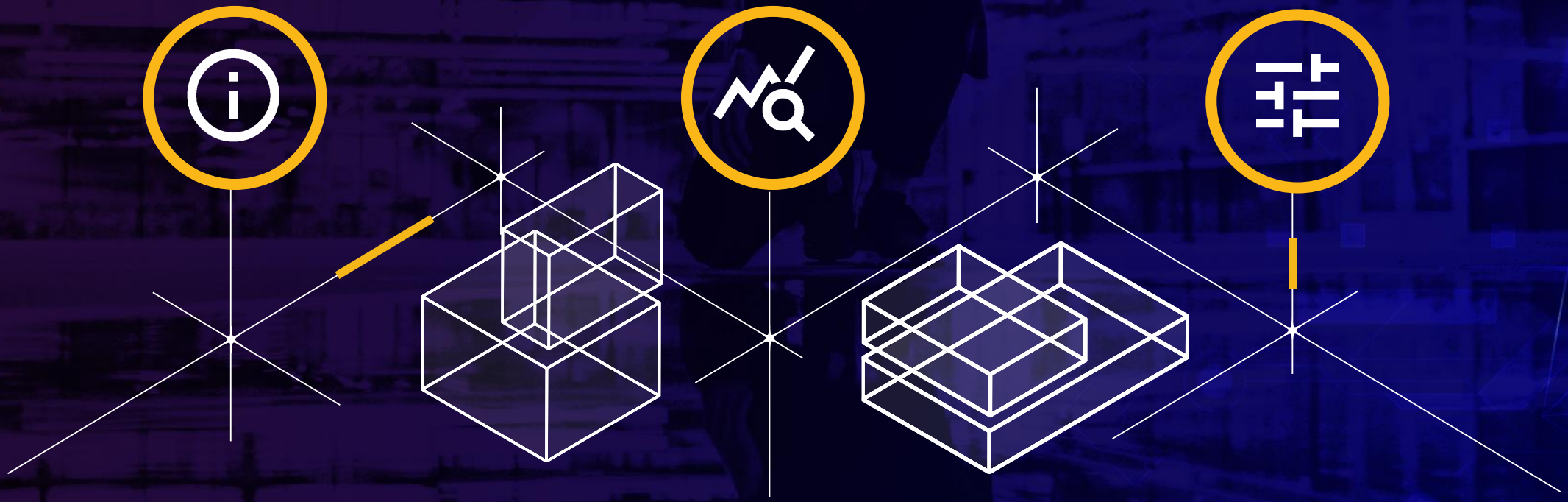
intertwined systems sharing information

What do smart cities have in common?

Information

Analysis

Control



Avoid a **locked-in** city

Cities that deploy open standard systems will be able to use smart city solutions from multiple suppliers that “talk” to each other.

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Connecting the dots: **integration**

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smart city enabler

infrastructure distributed throughout the entire city

continuous **power supply** throughout the day

available open protocol **communications**

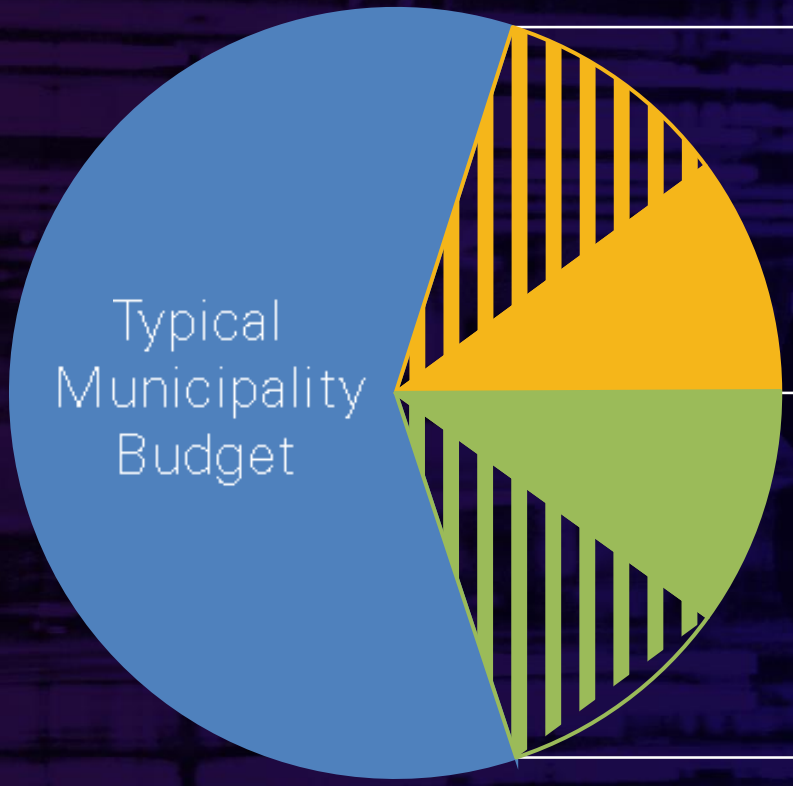
smart street lighting - immediate benefits

save
energy & money

reduce operational
costs

foundation
for smart
cities

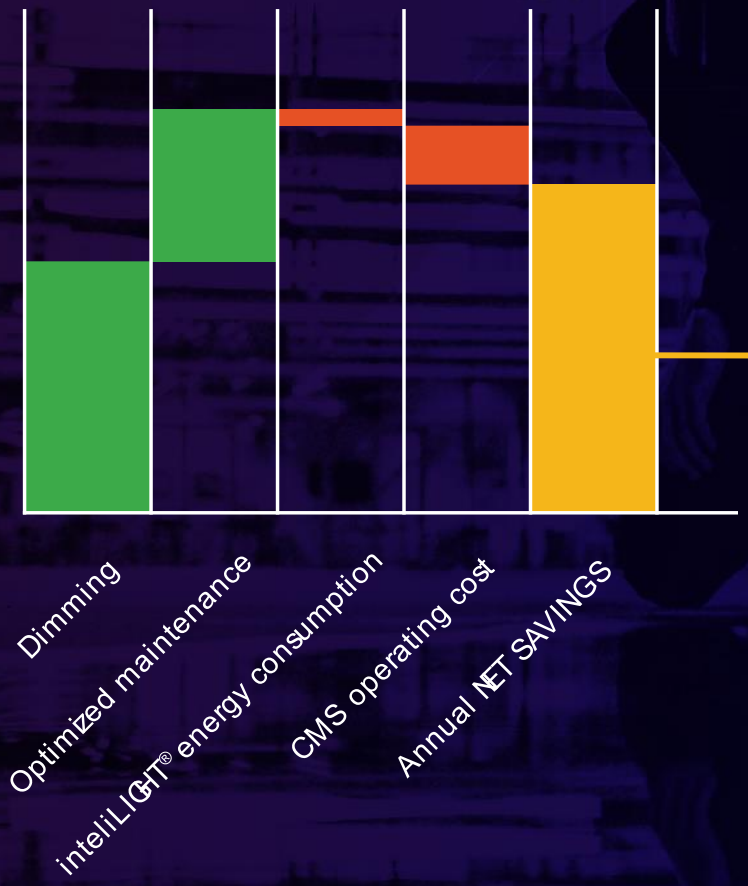
important savings for municipal budget



betwheen **10-20%**
municipality's typical budget allocation
for street lighting **energy consumption**

betwheen **10-20%**
municipality's typical budget allocation
for street lighting **maintenance**

important savings for municipal budget



Annual savings breakdown

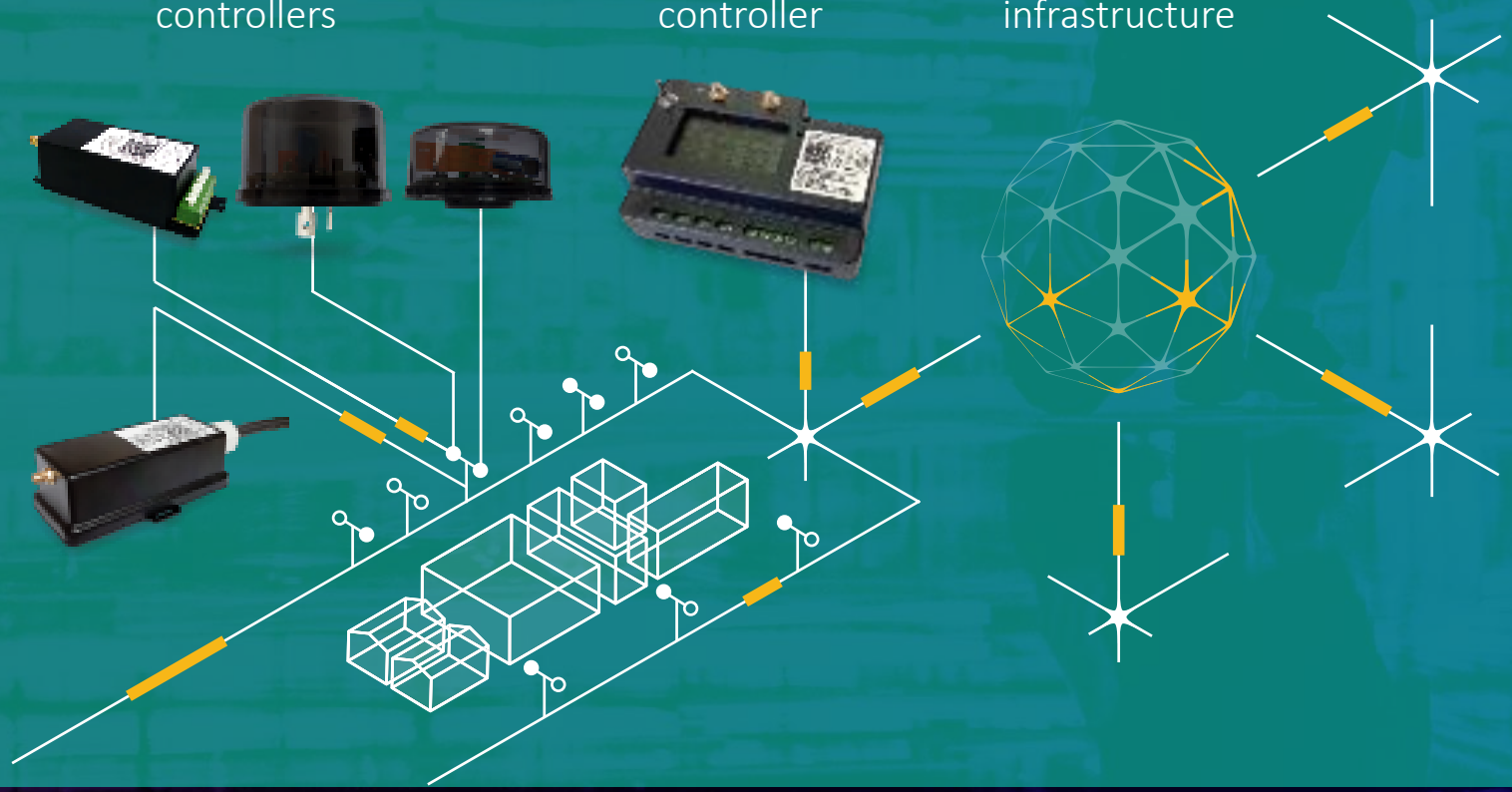
Typical 15yrs ROI: 300%

general system architecture

inteliLIGHT®
luminaire
controllers

inteliLIGHT®
lighting panel
controller

private or public
communication
infrastructure



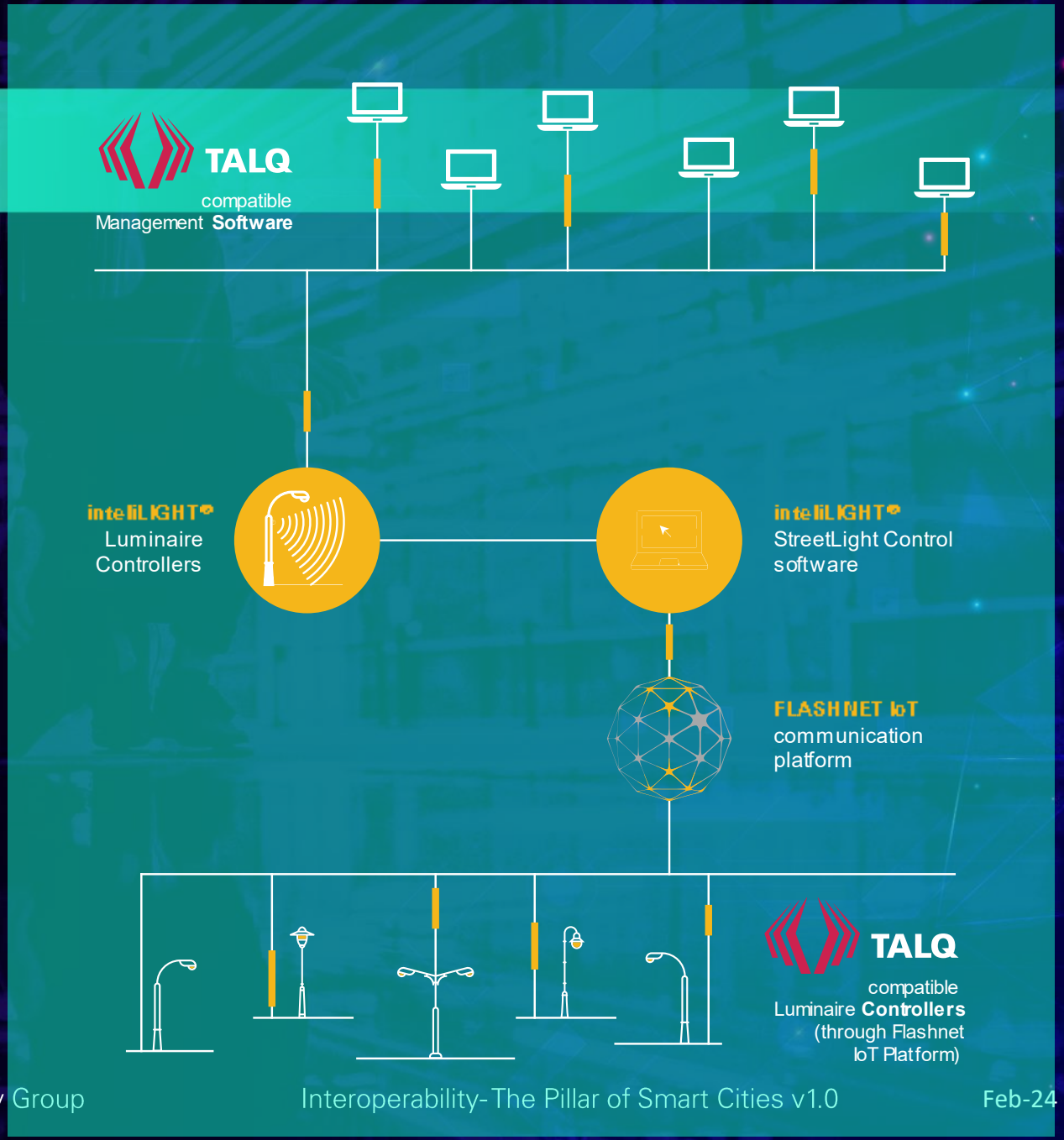
inteliLIGHT® StreetLight Control software

smart city platforms
integrations

CISCO · Actility · orange Live Objects · NOKIA · ENGIE livin' · ERICSSON

inteliLIGHT®

a **TALQ2** certified solution (API standard)



EV charging

Using the inteliLIGHT® remote management platform, Brasov is one of the first European cities to witness Electric Vehicle charging directly from the street lighting grid.

- able to charge all current electric vehicles and plug-in hybrids with power up to 22 kW
- outdoor use - proven fiberglass reinforced polyester (SMC-sheet molding compound) with superior mechanical, chemical and electrical properties
- medium charging speed: 2-3 hours
- multiple payment options (SMS, credit card, pre-paid etc.)

Environmental and air quality

- Temperature
- Humidity
- Pollution
- Noise level
- Dust level

security infrastructure

When people feel safe and the feeling of general well-being encourages tourists to come, businesses to thrive and the city will attract even more prosperity.

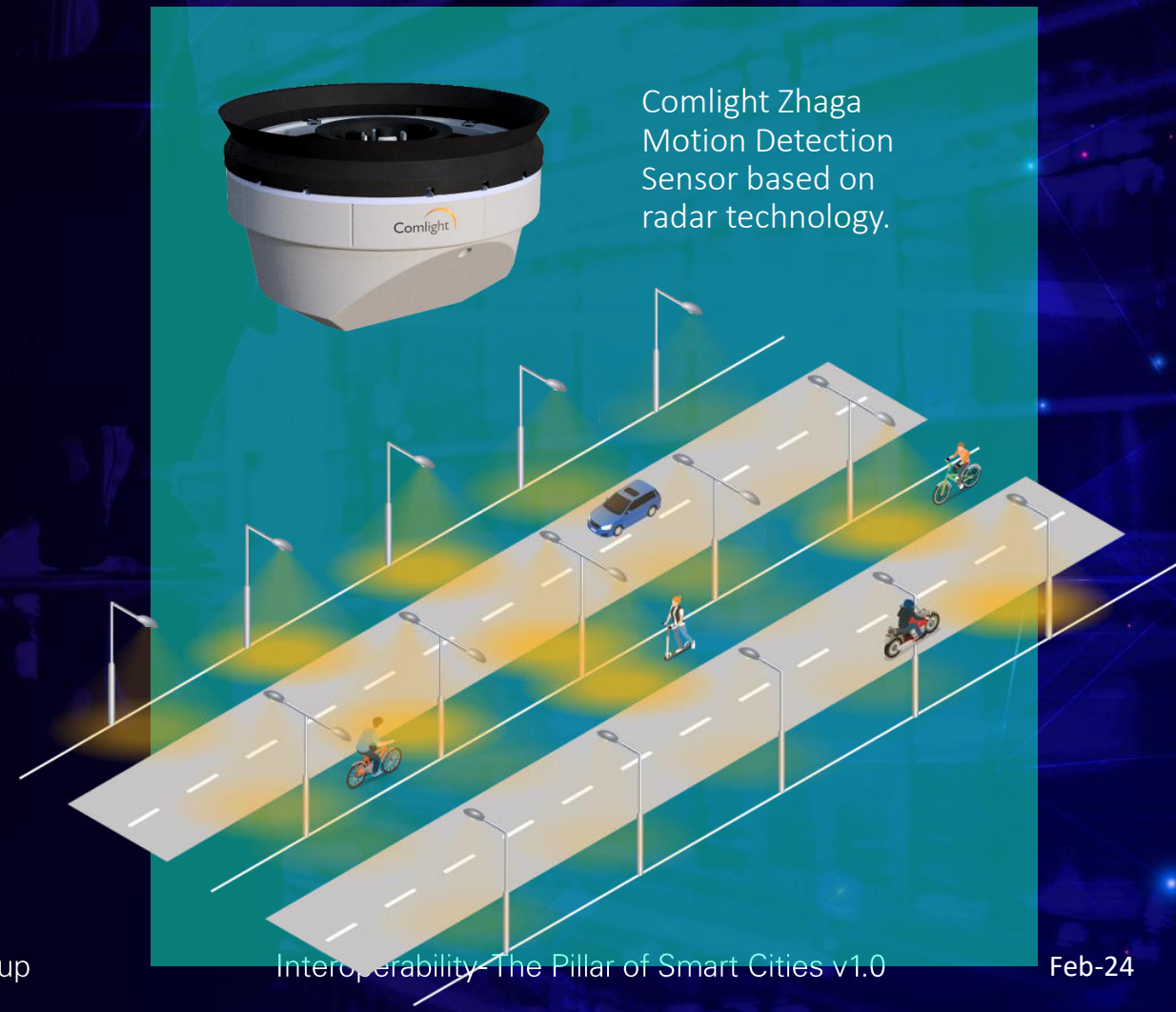
- citywide coverage: any hotspot in the city can be easily monitored
- maximal resistivity against dust, water, and mechanical damage
- wide-angle camera with night vision

adaptive lighting

integrated motion sensors in Bacau, Romania

The street lighting adapts to traffic conditions based on the input provided by the motion sensors.

- Motion sensors can be connected to controllers via “dry contact” input or via DALI2 digital input
- Advanced doppler radar motion sensor, effective even in tough weather conditions (rain, fog)



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inteliLIGHT®

city-centric smart street lighting

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strong worldwide partnerships

Since 2005, more than 300 million people have already witnessed the benefits of inteliLIGHT, in hundreds of cities on 5 continents

Washington, D.C., USA

- 75 000 streetlamps
- NEMA controllers
- NB-IoT, LTE-M communications
- inteliLIGHT® Streetlight Control Software
- Smart city integrations: Wi-Fi coverage

Brussels, Belgium

- 85 000 streetlamps in the city
- NEMA controllers
- NB-IoT, Cellular communications
- Third party software, integrated via TALQ2

Santiago, Chile

- 70 000 streetlamps
- Pole-mounted and NEMA controllers
- LoRaWAN™ and Cellular communications
- inteliLIGHT® Streetlight Control Software
- Smart city integrations

Brescia, Italy

- 44 000 streetlamps
- Zhaga controllers
- LoRaWAN™ public communication network
- inteliLIGHT ® Streetlight Control Software

Mecca

Efficient street lighting & custom sensor integration in **Mecca**

In one of the first large scale smart street lighting deployments in the Middle East, Mecca chose inteliLIGHT® PLC street lighting management solution with customized features: cable cut detection, pole door opening and pole impact sensors.

Dubai

Lighting efficiency and architectural value for **Dubai Water Canal**

Provide smart management capabilities, while maintaining the architectural integrity for the award-winning street lighting design project of Dubai's newest touristic and commercial attraction: install inteliLIGHT® embedded controllers inside the street lighting fixtures.

Abu Dhabi

10 smart city services use Sigfox to communicate and integrate in **Abu Dhabi**

Aiming for true smart city synergies: street lighting control, seamlessly integrated in a project with 10 other city services like asset tracking, air quality monitoring, smart parking, water metering and even palm tree weevil detection, all using Sigfox communications.

integration initiates synergies

inteliLIGHT®

TALQ

UCIFI

LONMARK®

ENGIE livin'

NOKIA

ERICSSON

CISCO

OPEN TELEKOM CLOUD

T-Systems

orange™ Live Object

Actility

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THANK YOU!

For more information visit:
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solutions@intelilight.eu

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