

From Smart Lighting to Smart City the public lighting as enabling infrastructure for the resilient urban territory





Urban Resiliency

Urban Resiliency is the capability to prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to public safety and health, the economy, and security (from: wikipedia).

The urban territory will have to proactively react to changes, through three fundamental strategies:

- Energy sustainability,
- Environmental security against natural disasters
- Defence

*A Smart City should properly
address these matters*



Energy Sustainability

Street light represents roughly 12% of the total electrical consumption on the planet. For a municipality it represents the highest cost in energy

Replacing old lamps with LED is providing massive contribution to energy efficiency but it cannot be sufficient

Controlling the luminous flux, the real-life consumptions the diagnostic of the infrastructure and the other KPIs is mandatory to correctly manage the illumination

Moreover a remote control platform will ENABLE the infrastructure to host Smart City solutions.



What is a Smart City?

A universal definition of Smart City has not yet been defined...

... and maybe it will never be.

For sure any of the hundreds of «Smart City» projects presented so far also includes solutions for streetlight

Streetlight is universally considered to be one of the most important assets for the Smart City Platform because of its fundamental characteristics



What is a Smart City?

Streetlight has the perfect mix to be considered as one of the main infrastructures for the Smart City Technology because

- Street poles are capillar on the urban territory
- Street poles are powered
- Street poles can easilty acceed to communication features
- Street light is a proprietary and re-usable infrastructure

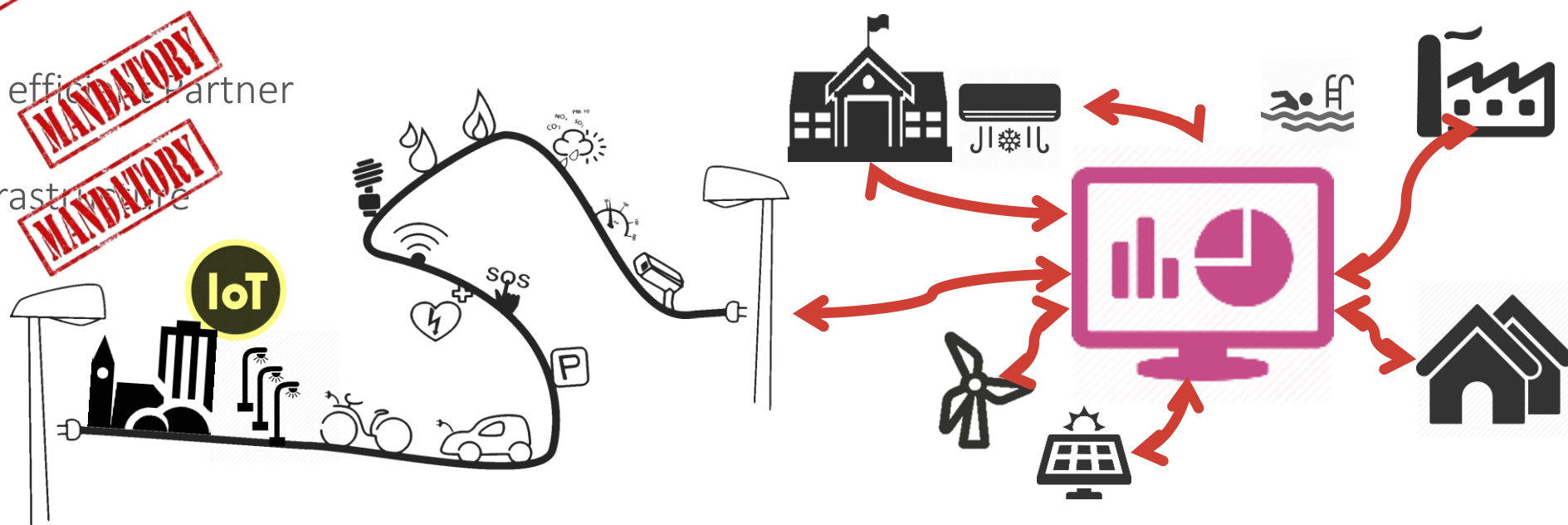
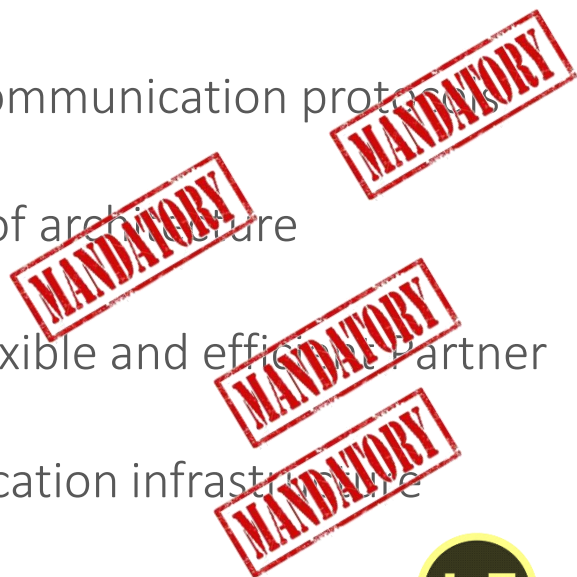




What do you need to start a Smart City?

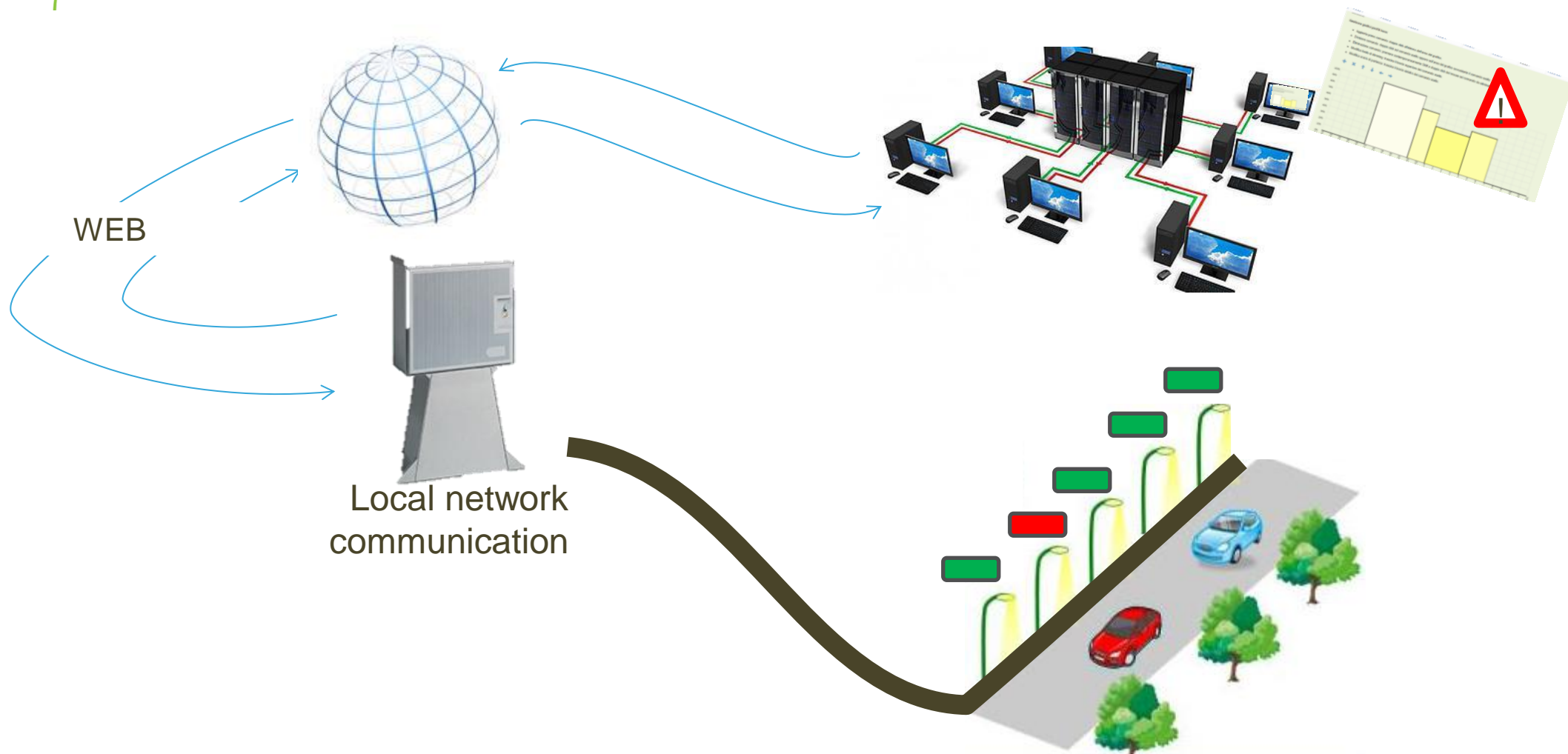
Technology is not sufficient to create a Smart City.

- Standard communication protocols
- Future-proof architecture
- Reliable, flexible and efficient Partner
- Cross-application infrastructure

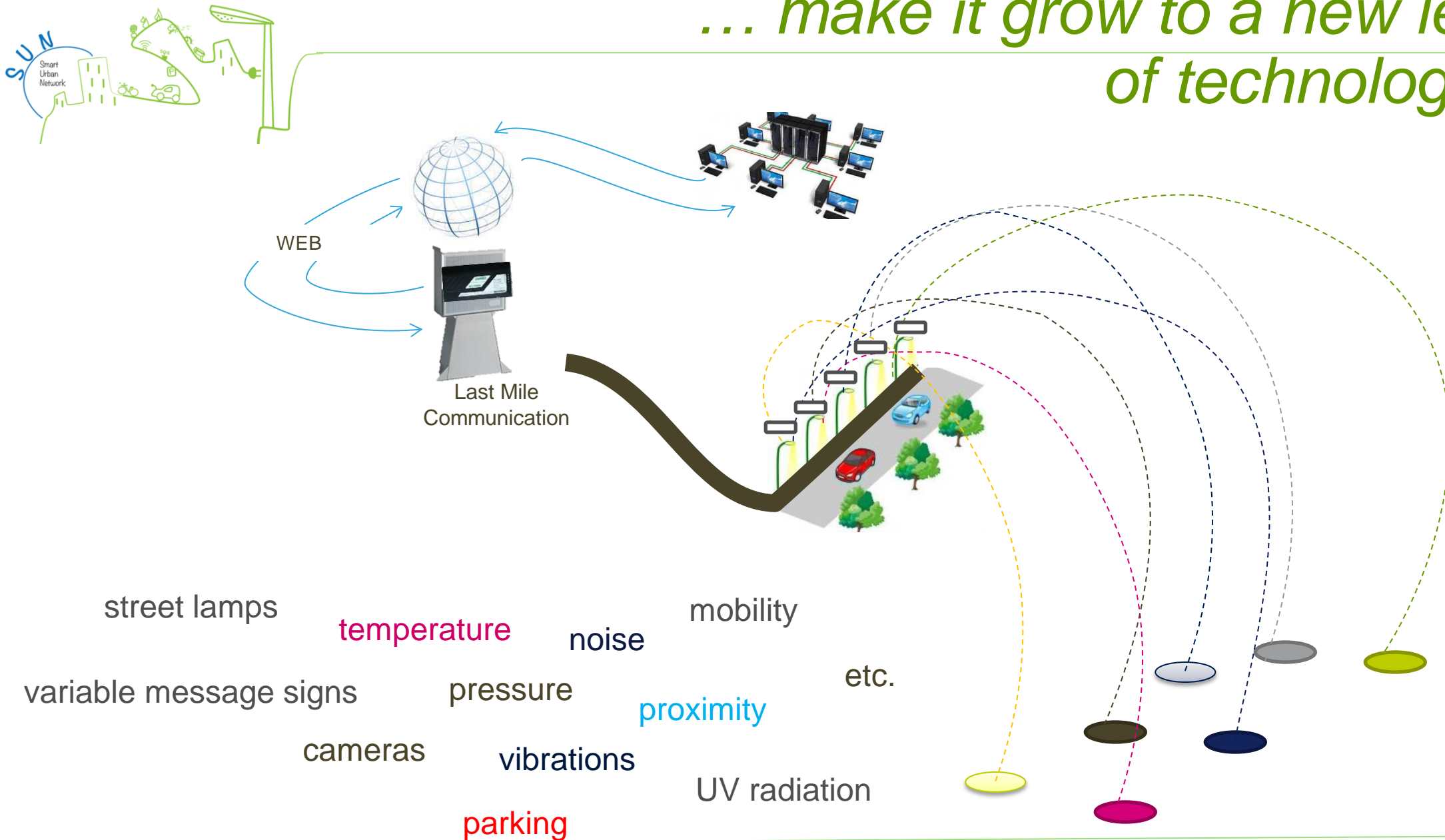




Why not starting with what you already have...

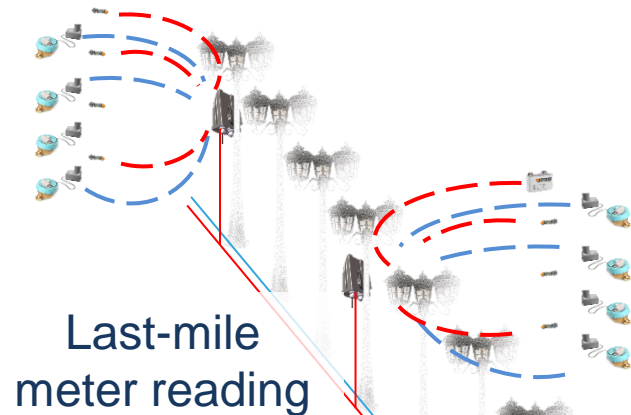


*... make it grow to a new level
of technology...*

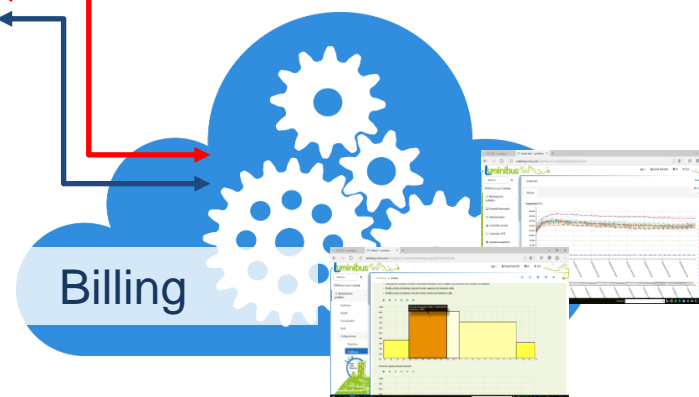




... use it to read meters...



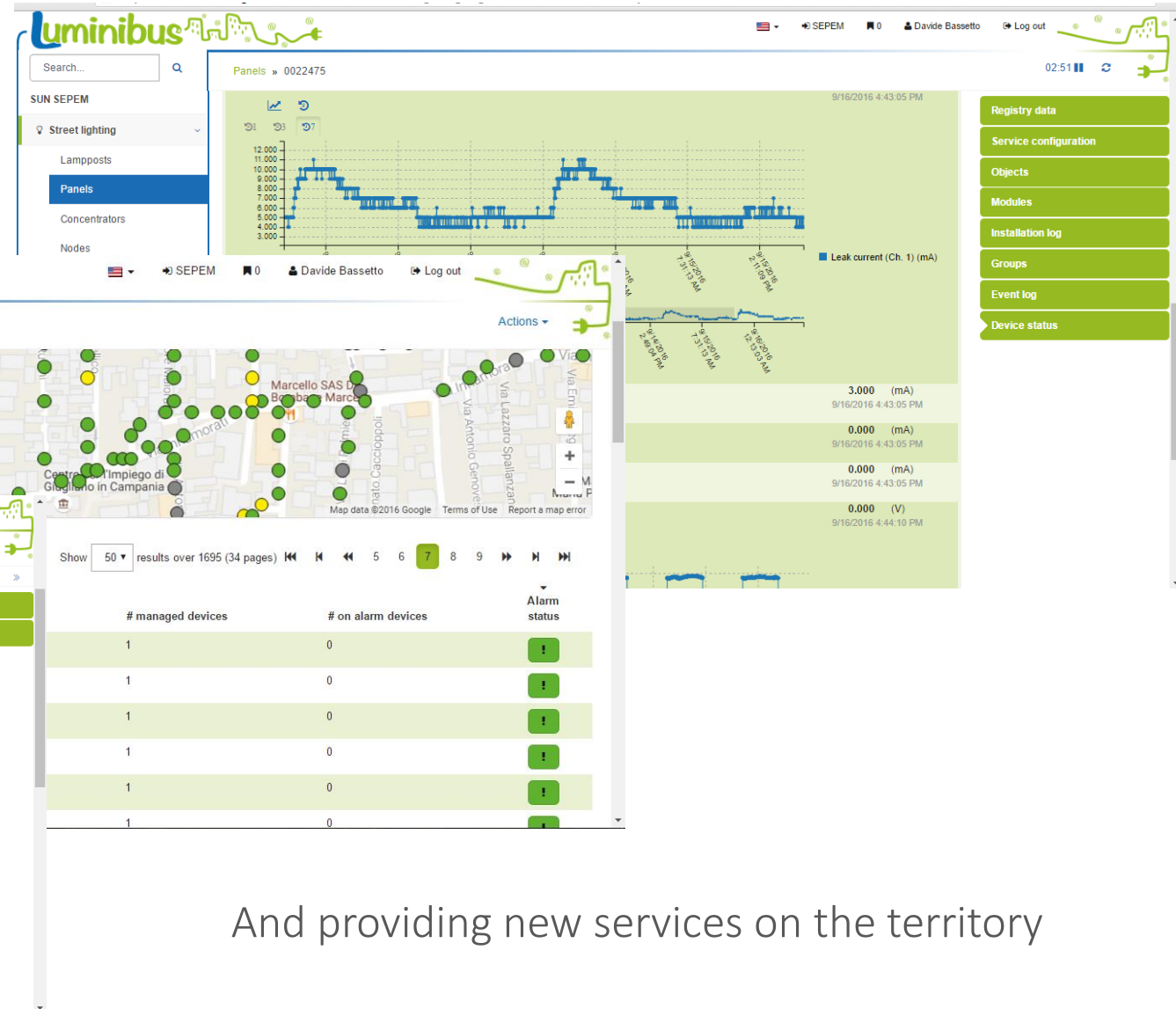
Data
acquisition and
concentration





... and achieve your targets

By optimizing your processes,
measuring your KPIs



And providing new services on the territory



Luminibus platform

Multi functional: point-to point management

switchboard management (switch on/off, measurements, alarms, etc.)

electrical network management (leakages, voltage drops, cable theft, etc.)



Already existing and massively deployed:

more than 200.000 lamps already controlled!

Based on Standard Communication Protocols

Secure and certified

Open to any present or future application

Enabling platform for Smart City

meters
AND more
OPEN TECHNOLOGIES



LUMINIBUS^{MS}



a.p.systems in a nutshell

- Founded in 1986 by the actual owner and president (family company)
- Direct and internal Research and Development of complete IT and IC&T solutions. Standard or Custom-based
- Long experience in advanced electronic design, production and massive deployment: More than 2 Million devices on field, More than 200.000 lamps controlled
- Billions of daily transactions on energy metering and management, performed by a.p.systems solutions
- Cloud computing expertises, internal certified datacenter (ISO 27001 and Italian Agency for Digital Government Activities)
- More than 120 internal high professional employees



Thank You!

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