The Smart Urban Platform

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A Smart City

What makes a city smart

- ☑ An efficient technological network that connect people and things
- ☑ Generation of intelligence from integration of data
- ☑ Intelligent use of new technologies, respecting the environment
- ☑ Use performance indicators to compare policies, analyse results, reduce costs

Make the physical and digital worlds compatible
from the City Protocol Society

From the Internet of Things to the Internet of Cities

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The Smart Urban Platform

Smart cities become part of the future Internet
People, Content, Services and the **Internet of Things**
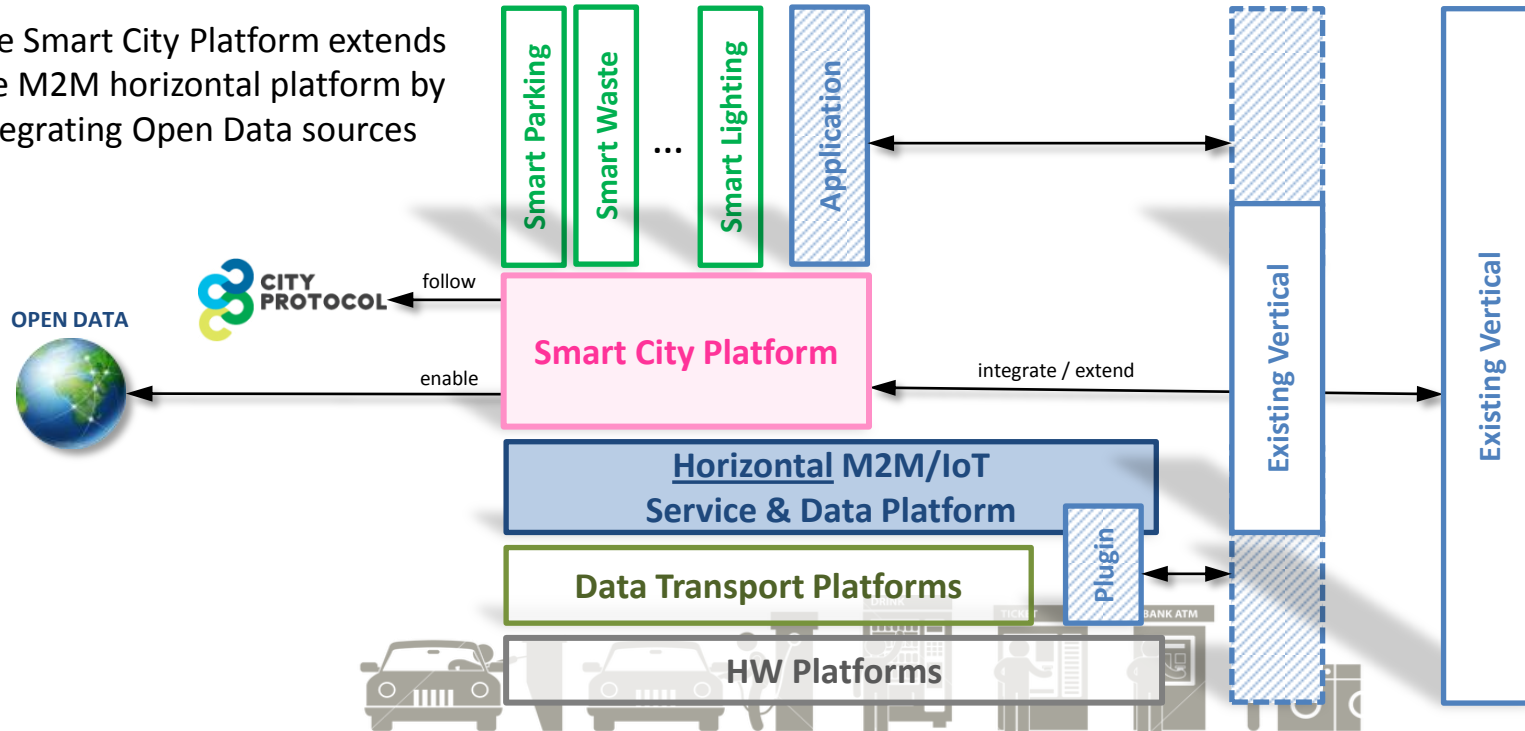
IoT will change how we interact with the world around us

The city as a digital spatiality embedded into the physical space
Building, roads, vehicles and other infrastructures linked to **applications**

Data transport, data aware and application platforms
for creating a Smart City **information space** where smart tailored services and better city management are delivered

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Solutions
From Vertical to Horizontal to Domain Specific

The Smart City Platform extends the M2M horizontal platform by integrating Open Data sources

OPEN DATA

CITY PROTOCOL

follow

enable

Smart Parking

Smart Waste

...

Smart Lighting

Application

Smart City Platform

integrate / extend

Existing Vertical

Existing Vertical

Horizontal M2M/IoT Service & Data Platform

Data Transport Platforms

Plugin

HW Platforms

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Plat-One
Application Development Tools

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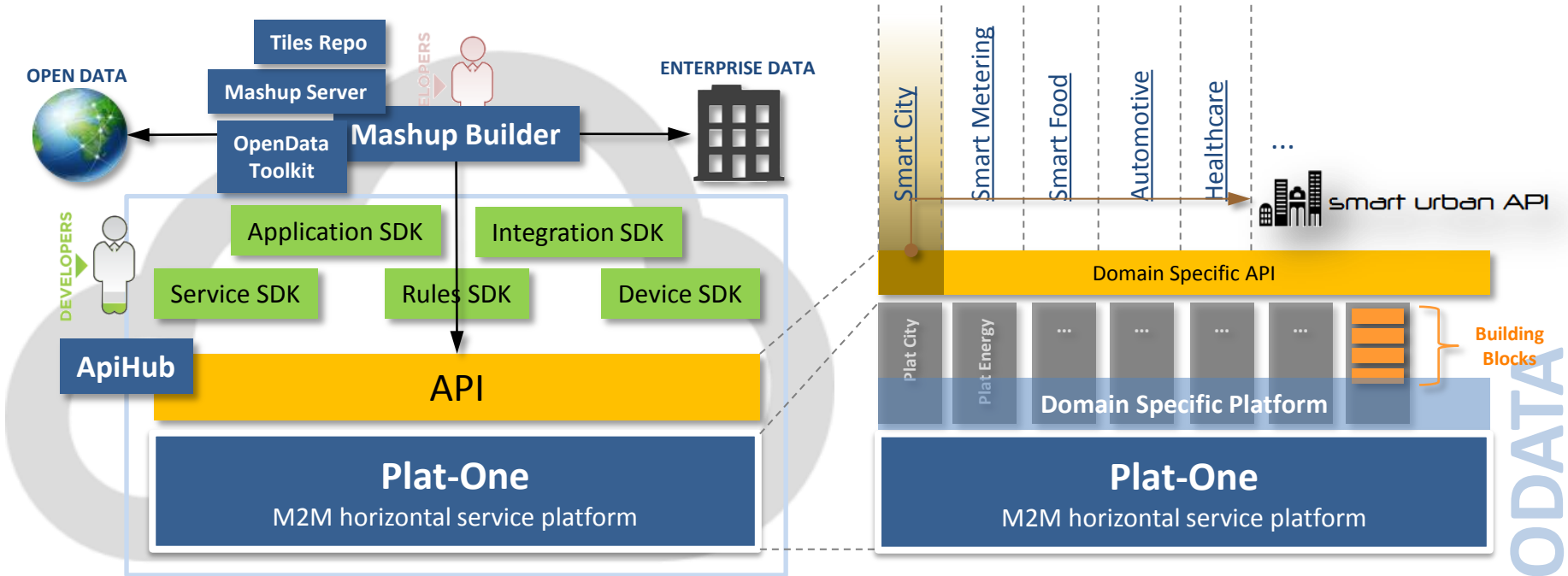
Use Cases

Projects & Pilots

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Actionable software

Parking and Lighting
Deploy a pilot with 1,000 lightpoles and 360 parking spots.

Spain

Multipurpose Network
Deploy an agnostic, open urban network based on 6lowpan

Germany

Integration of Systems
From close, vertical to open, horizontal approach.

France

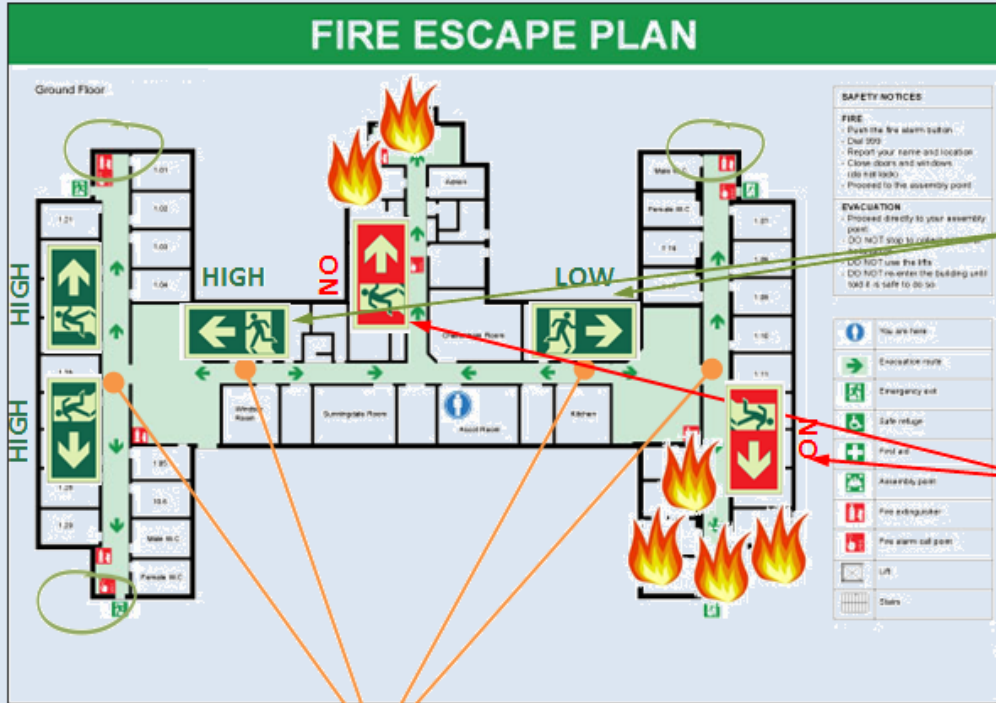**Wi-Fi Hotspot Service**
Cover all touristic areas of the city

Italy

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Electric Mobility & Car Sharing
SELEX Catania

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Escape Routes in Buildings

FIRE ESCAPE PLAN

Ground Floor

HIGH   HIGH   HIGH

HIGH   NO   LOW   NO

SEMAPHORES: dynamic indications for the ecape route to take along the way out.
The density of people moving in that direction and the capacity of the escape route are used to calculate the ammount of people allowed in that direction.

OFF-LIMITS: points along an escape route where passage is prohibited.

FORKS: points along an escape route with multiple-choice and directions.

Exit

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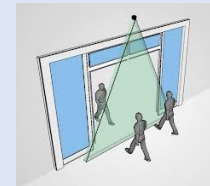
# Dynamic Street Lighting

Smart Street Lighting

Municipalities want to manage the lighting infrastructure more efficiently, reducing the cost of one of the most expensive services in the city and intervene on environmental concerns such as CO2 emissions for a better life style.

Remote Lighting Monitoring and Control solutions, such as the ones implemented through Plat-One® help increasing efficiency, cutting down on maintenance and energy costs, and improving services to citizens.

Functionalities include:

- Remote and secure device management, on/off or dimming based on customizable or environment conditions.
- Detection of lamp conditions: preemptive/predictive maintenance.
- Historical data reporting: energy consumption, voltage, etc.
- Integration with other smart city solutions (ie: camera surveillance for traffic monitoring)
- Geo-referenced location of street lights.
- Street lamps clustering: scheduled operational services to group of lamps.
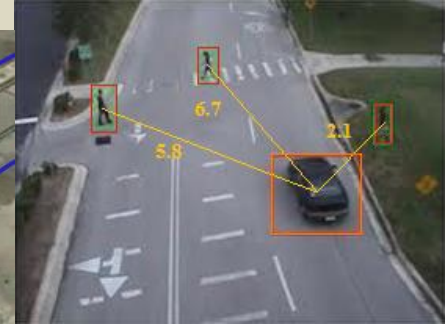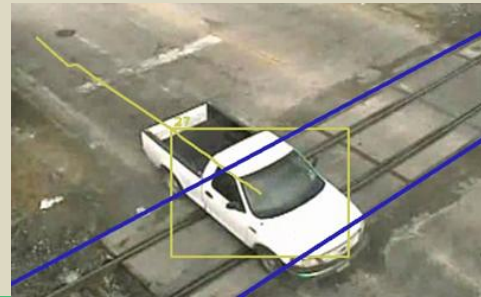- more ...

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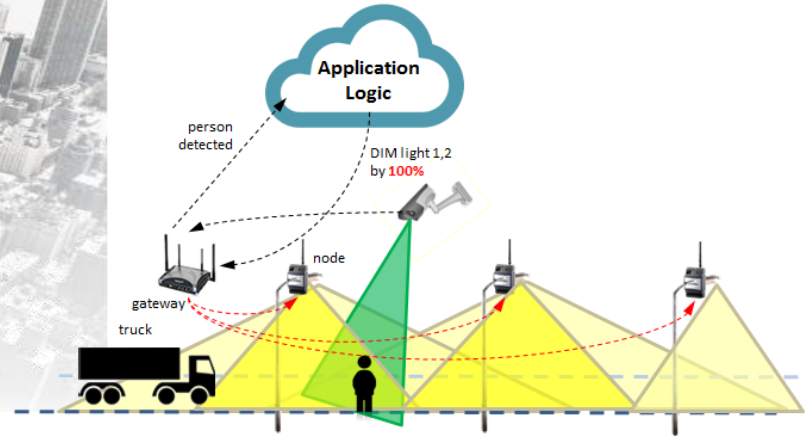
Vision-based Parking

Video camera and vision analytics for parking space detection

In collaboration with Ruhr Universitat Bochum and STI Microelectronics.
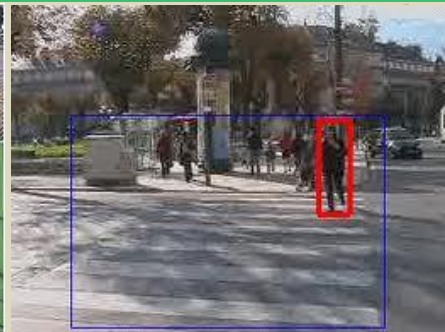
E1_Cam 1   E1_Cam 2

Security threat detection

Detecting people or vehicles moving from one area to another, or breaching in not allowed areas.
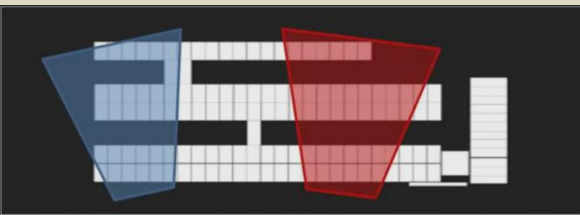
The Smart Urban Platform
Enabling Smart Cities

CONCLUSIONS

In order for a smart city to provide **advanced services** and applications, all technologies and services in smart cities require **horizontal open platforms** and an **ubiquitous ICT infrastructure** enabling them. It is through a **horizontal platform** that the integration of different products allows to fully capitalize on the variety of **connected objects** and **data** which make up the cities we live in.
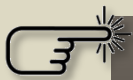
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www.plat-one.eu

Machina Research

What they say about us …

The Plat-One platform seeks to avoid the limitations inherent with legacy M2M platforms through the use of smart adapters and APIs, SDKs, an integrated developer environment, and a powerful rules engine.
A notable differentiator is data traceability, so that users can be sure of (and control) the uses to which their data is being put, which is a critical concept for a fully-fledged Internet of Things environment.
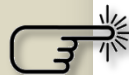
The emergence of M2M/IoT Application Platform
[Source: Machina Research, Sept 2013]

Read the full white paper

The Wireless Noodle

Machina Research
White Paper for ABO DATA

Data aware platforms deliver a differentiated service in M2M, IoT and Big Data

December 2013

Download the January 2013 white paper at

PLAT-ONE

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Thank you