



ENABLING SMART CITIES BEYOND THE BUZZWORDS, WHAT?

M2M Competence Center

Milan, May 20, 2014



LIFE IS FOR SHARING.

ANOTHER DEFINITION OF “SMART CITY”?

INFORMATION IS POWER

PROCESS MANAGEMENT

- Smart Cities have the objective to manage, monitor and control a complex ecosystem, with different social, political, economical aspects to be considered and harmonized.

**SMART
CITY**

PROCESS AWARENESS

- Understand and have visibility on all the elements which are part of the ecosystem, in order to be able to act on them, through effective policies.



LIFE IS FOR SHARING.

WHAT DOES IT MEAN? SMART PARKING IN PISA

Smart Solution in use

Pisa has used smart parking tools for 5 years



Parking Availability

Where citizens park & how to inform them



Improve Traffic Management

No integration between smart tools from different vendors



Big Data Analytics

How to use existing data to improve processes

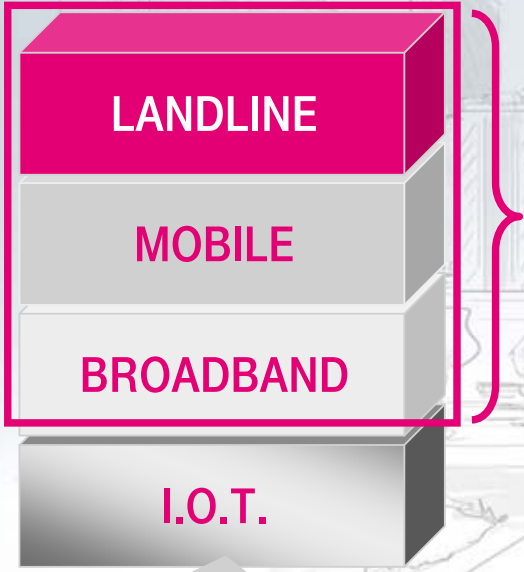
PARTNER: KIUNSYS SRL



LIFE IS FOR SHARING.

STRATEGIC DT GROUP APPROACH ON SMART CITIES

THE IP TRANSFORMATION PROJECT



IP TRANSFORMATION IS ONGOING

DT SMART CITY VISION

SMART CITY 2.0

IP TRANSFORMATION

... "the old infrastructure will not be able to absorb future increases in data traffic.

"There's just no getting around the IP transformation," ... (C. Nemat)

OPEN ARCHITECTURE

... "it would be more effective for end users if the operator switched to a "horizontal approach". ... Deutsche Telekom now uses **open APIs** and **open architectures** to create an open interface for solutions provider partners." ... (J. Hase)



LIFE IS FOR SHARING.

"There's no getting around the IP transformation"

In an interview with the Börsenzeitung newspaper, DT Board member for Europe and Technology Claudia Nemat explained the Group's strategy for building a pan-European network and why DT is focusing on Eastern Europe.

Feb 26, 2014 | Board member for Europe and Technology Claudia Nemat seized the opportunity in her interview with the Börsenzeitung newspaper to underline the benefits of converting the Deutsche Telekom network to IP technology across Europe. "The first to benefit will be our customers, who will receive improved service and better products," she said. She then added that in turn, the Group would become significantly more competitive, for example by considerably reducing the time-to-market for its products and services. According to Nemat, the old infrastructure will not be able to absorb future increases in data traffic. "There's just no getting around the transformation," she emphasized. When asked about the delays in its implementation, she explained that creating a pan-European network is a complex challenge and acknowledged that the biggest mistake made by the industry in the past was to view the transformation as a purely technical problem. "We are confident, however, that we will meet each deadline that we have set for every country," said Nemat.

Change is afoot in eastern Europe
The Board member confirmed that DT is focusing heavily on eastern Europe. "We have a clear strategy to implement an integrated network expansion in all countries of eastern Europe. However, the nature and pace of the integration varies from country to country," Nemat said. Of course, this strategy requires DT to have majority shares in the relevant national companies, and the recent acquisitions in the Czech Republic were a pertinent step in that direction. In Macedonia the IP transformation has been completed and the new network is set to generate annual savings of 10 euros per customer. When asked about the Group's plans for Slovakia, Nemat explained that DT supports the government's plans to sell its shares and that it doesn't renounce any of its shareholder rights in this regard. She also highlighted the fact that DT has made a conscious choice to invest heavily in OTE to help its Greek subsidiary get out of debt. "We think it's key to be well-equipped to weather any potential crisis," she said. "Greece is a good example of that. OTE is keeping its cashflow stable and has increased both its margins and its market share."

Deutsche Telekom to emulate App Store with M2M model

November 12, 2013 | Written by Clairendal Sahala

German operator group Deutsche Telekom is looking to emulate Apple's success in the smartphone app market with its M2M offering. Jürgen Hase, vice president M2M competence center at the operator told delegates at Internet of Things World Forum 2013.

While some operators have opted to partner with a third party platform provider such as Jasper Wireless, Deutsche Telekom has instead chosen to develop a solution in house. Hase has previously explained to telecoms.com it made this call due to the requirements coming from the automotive sector, the energy and health sectors meaning operators are going to have to add many additional features and build them in their own way to ensure full integration with their network.

In his keynote this week, he elaborated on the concept and explained that the operator group had previously looked to build tailored M2M platforms for its enterprise customers according to vertical. However, the firm then realized it would be more effective for end users if the operator switched to a "horizontal approach". He said Deutsche Telekom now uses open APIs and open architectures to create an open interface for solutions provider partners.

He added that the firm is looking to develop a minimum of 50 solutions per year for the verticals that it targets. He noted that there are a number of everyday applications that will benefit from M2M connectivity, such as street lighting, parking, pollution monitoring, public transport and waste management. While he conceded that not all of the solutions developed will catch on, the operator will can those unsuccessful solutions and continue to help innovate new and more successful ones.

"We're not experts in vending machines, for example, so we work with partners in that space and the way we look to serve them is by offering them open interfaces for our platform."

He added that ultimately, the best approach to providing M2M services to end users will be determined by the market. However, he noted that iPhone maker Apple has been successful in a similar endeavour with its smartphone App Store.

"Apple created a development platform, a frame for developers to create apps for the iPhone and iPad and then it sells those apps to customers through the App Store. We're looking to develop the same for M2M customers," he said.



LIFE IS FOR SHARING.

WHAT NEXT?

WHERE WE ARE IS REALY WHERE WE WOULD LIKE TO BE?

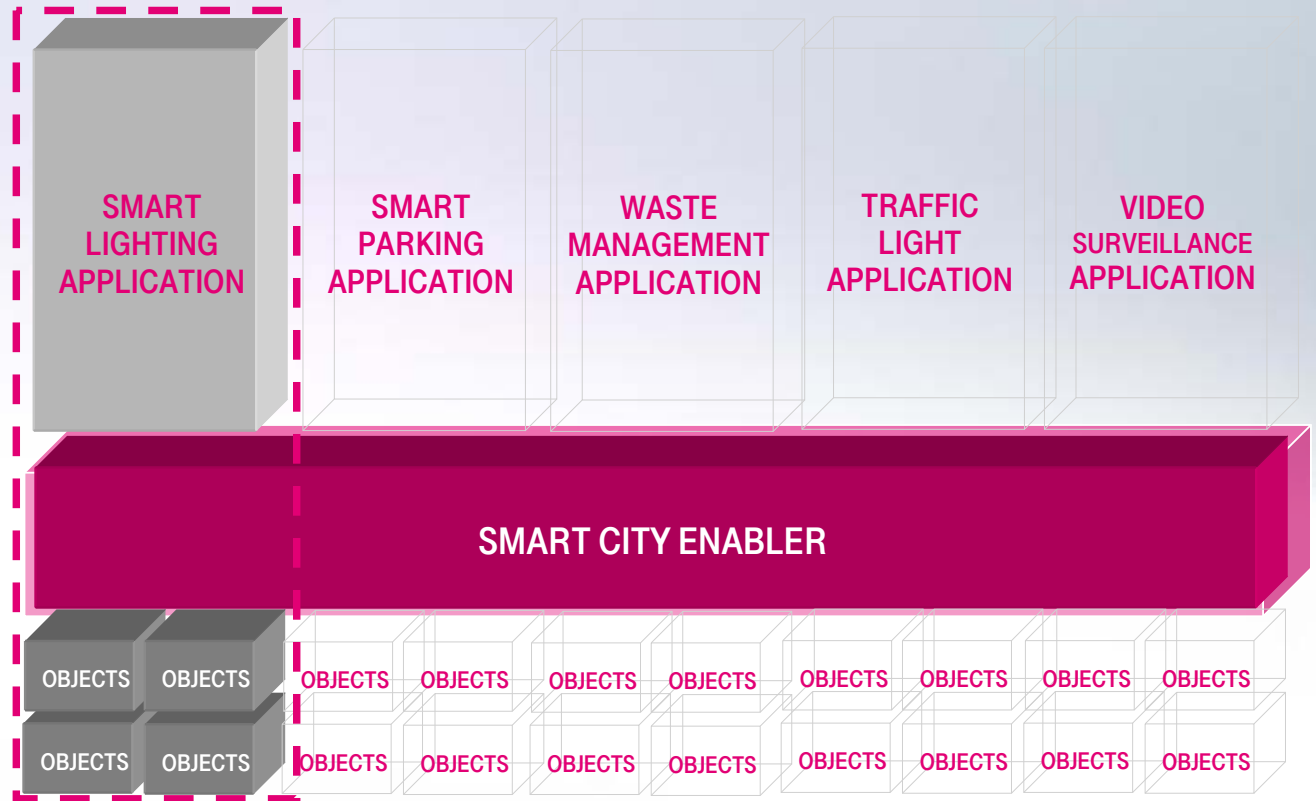
The mandate from the EU institution to the ICT industry is to:

RETROFIT THE EXISTING CITY'S INFRASTRUCTURE

in order to make **CITIES SMART**.

This requires a comprehensive **HORIZONTAL APPROACH**, approach DT is already implementing from the data transport side.

What about the role of DT in supporting the **OPEN DATA** horizontal approach, where SW platforms would come into place?



LIFE IS FOR SHARING.

ENABLING SMART CITIES

THE “SMART CITY ENABLER”



APPLICATIONS ENABLING PLATFORM

HORIZONTAL DATA TRANSPORTATION

AGNOSTIC OBJECT MANAGEMENT



LIFE IS FOR SHARING.



THANK YOU



LIFE IS FOR SHARING.