

“Truly *Smart Cities* must be Safe, Secure and Resilient”

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Enzo Peduzzi , Euralarm**

Societies build elaborate economic and cultural structures in cities



12% of the urban population live in 25 Megacities >10 m
total population: 453 m



7% of the urban population live in 50 Large cities 5-10 m
total population: 300 m



20% of the urban population live in 400 Mid-size cities 1-5 m
total population: 827 m



11% of the urban population live in Small cities 0.5-1 m
total population: 363 m



50% of the urban population live in Very small cities <0.5 m
total population: 1950 m

» 54% of the world's population (3.9 billion people) live in cities, increasing to 4.7 billion people until 2030

» More than 1 million people migrate to cities every single week

Productive cities are the basis for the worldwide economic development



**Built on 2% of the earth's land mass,
cities with 50% of the world's population
generate:**

- » 75 % of the global economic output
- » 75 % of the global usage of natural resources
- » 75 % of the global carbon emissions
- » 80% of the global energy consumption

» **80% of the recorded criminal acts,
reducing the value of the global economic output by 20%***

Sources: United Nations University 2014, United Nations Environmental Programme 2014, Airbus GMF 2013 / * UN estimates, needs further substantiation

The backbone of a city is its infrastructure

The most urgent questions of city authorities:

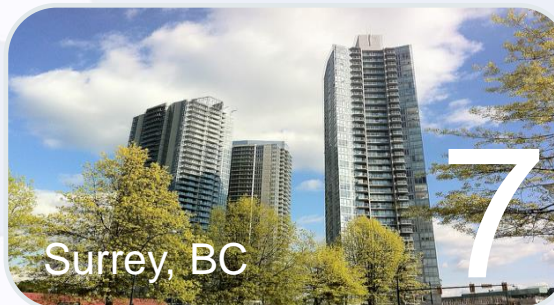
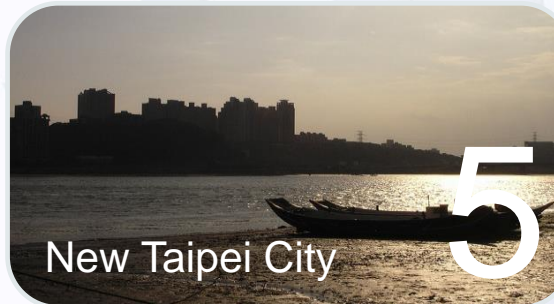
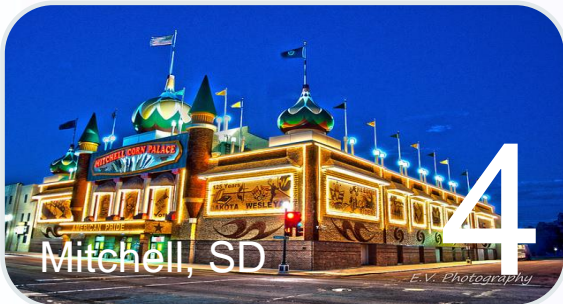
- » How to manage the ever increasing traffic?
- » How to reduce the energy consumption and emissions?
- » How to provide reliable and efficient transportation
- » How to bring enough goods in and out the city?
- » How to ensure security and safety of people?
- » How to finance all this?



- » Cities compete in a global economy for business investment, talent and more.
Secure and reliable infrastructure can make a crucial difference in this global competition.

Forbes Smart Cities 2015 (Intelligent Community Forum)

euralarm



Source: Forbes Smart City List 2015

pictures © Siemens AG 2015

Most attractive cities according to the Mercer 2015 Quality of Living Survey



Source: Mercer Consulting 2015

pictures © Siemens AG 2015

Successful cities need more than just energy, transport and ICT solutions



To be truly competitive, smart cities must cope with a wide range of challenges, such as:

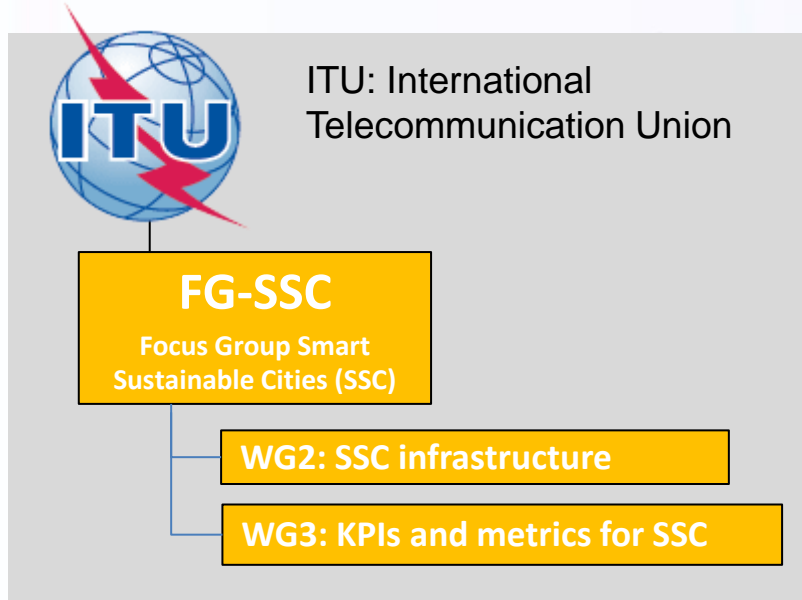
- » Political and social stability
- » Charisma
- » Energy and transportation
- » Safety and security
- » Hygiene and healthcare
- » Urban planning and housing
- » Access to goods and services
- » Education, jobs and culture
- » Water supply and sewage
- » Waste management
- » Environment
- » Tourism and recreation

To be truly smart, cities need to be resilient in order to survive.

(Source: Rockefeller Foundation, 100 Resilient Cities program)

City Resilience is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive and grow no matter what kinds of **chronic stress** and **acute shocks** they experience.

Global organizations have initiated standardization for Smart Cities



"A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social and environmental aspects"



ISO 37120: Global City Indicators

Create a set of internationally unified indicators to measure the performance of global cities in a wide field of city services:

100 indicators in 19 areas, thereof

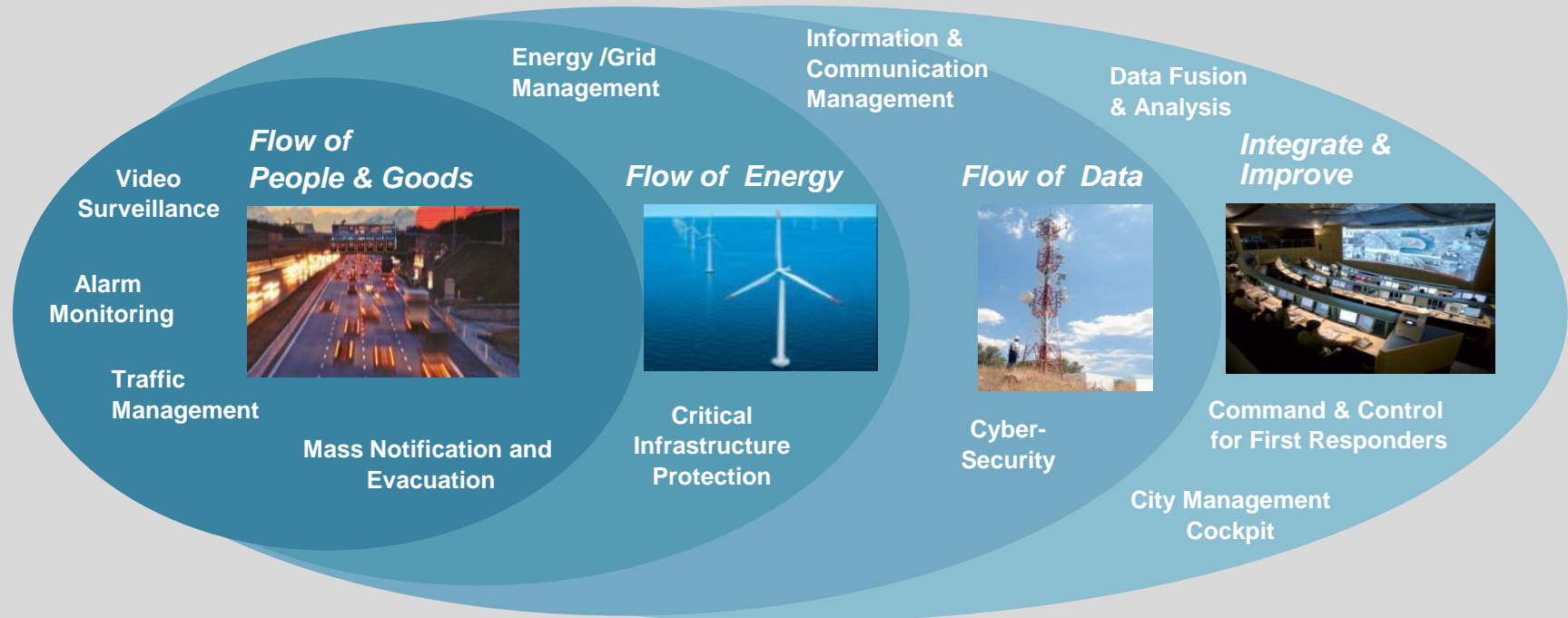
11 indicators dedicated to safety and security

More than 12 pilot cities to work with ISO 37120

A smart city needs, safe, secure and resilient infrastructure solutions



Interoperable systems provide infrastructure safety, security and resilience



» The Internet of Things (IoT) and the increasing use of smart phones will enhance our future possibilities but also increase the risk

***Cyber Security is important
however,
the best Firewall is useless, if
the access to the server room
is not controlled***

It's about Smart AND Safe, Secure and Resilient



1

Check what is already there, no need to re-invent everything again.
Participate in standardization activities

2

Include your stakeholders

3

Identify your critical infrastructure and use standardized metrics and checklists to describe the necessary protection measures

4

Always keep an eye on the resilience of the system “city”. Define what may fail and what needs to be up very fast, prepare for the consequences

5

Technology doesn't hold the solutions to everything, law enforcement personnel, businesses and engaged citizens will be crucial

***The City is not Smart
if it is not
Safe and Secure***

“Making Europe’s *Smart Cities* Safe, Secure and Resilient”

Contact

Enzo Peduzzi, Euralarm / Siemens

enzo.peduzzi@[siemens.com](mailto:enzo.peduzzi@siemens.com)