Orange and smart cities
position of Orange regarding their development

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today changes with **orange**™

making digital technologies work for society

"The digital transformation represents a far-reaching economic and social shift and is raising legitimate questions on how it will actually impact us. I personally believe that it amounts to a wealth of innovations that will tremendously improve the human condition in the 21st century.

Providing everyone easier access to the digital culture, working together to imagine more inclusive and more sustainable growth models, constantly paying attention to what society wants – it is both a serious responsibility and an incredible opportunity!

We want to be that proactive partner making the digital revolution work for people."

Stéphane Richard – April 2014

digital technologies accelerating progress for all

Orange is putting in motion new ways of collaborating and interacting to foster the emergence of new ideas and innovative business models that are vehicles of progress for everyone, from individuals and regions to communities and the environment:

▪creating digital solutions to spur economic and social growth that meets the needs of populations in terms of health, education and agriculture, etc.

▪supporting the emergence of a thriving creative ecosystem that gives economic stakeholders, from originators of digital technology to social entrepreneurs, opportunities to conceptualize new radical ways of generating creativity and prosperity.

▪providing real solutions for the energy and ecological transition and fostering the emergence of new production and consumption models for closer relationships between suppliers, industrial partners and public authorities

Smart Cities :
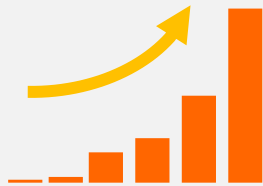## how new usages and new services change cities

smart cities | our definition

"a territory taking the best part of new technologies to improve the quality of life of citizens and to develop its economic and touristic attractiveness"

smart cities **|** why now?

population increase
+2 billion from now to 2050

urbanization
urbanization rate to reach 70% in 2050

climate change
CO_2 emissions increased 7 folds during last century

multiple challenges to deal with…

depletion of water
affects 1/3 of population on Earth

energy demand
primary demand to increase by 36% between 2008 and 2035

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smart cities | our challenges

economic

- develop economic attractiveness of territories in international competition
- find new business models
- create new types of job

social

- deal with usages of citizens more and more mobile: smartphones, applications
- allow technologic appropriation by largest number of people
- respect demand for personal data protection and security

technological

- manage explosion of information and data
- optimize deployments by mutualizing networks and data storages
- master deployed systems

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smart cities | core technologies

connectivity and network

transmission of information and performance of services

smartphones & applications

mobile urban services

telecommunication and information technologies ease the transformation of cities and the creation of new services

big data

data management and analysis

cloud

expenditure control and flexibility of project deployment

IoT

networking of city equipment

smart cities | relay of strategic growth for Orange

❯ transformation of cities: a structural movement

- structured business models
- many actors in position
- promises of growth in medium term

❯ a need-centered approach

- understand issues of cities and their partners to co-build effective solutions
- position as operator-integrator partner of city transformation

❯ an offensive strategy for 2013-2015

- accelerate our development by focusing on priority areas, on signature of new contracts and partnerships

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smart cities | our key competences

networks

- leader in deployment of fiber and 4G in France

- IP VPN network deployed in 220 countries and territories

expertises

- key actor of Machine-to-Machine (M2M)

- leader of NFC (contactless) deployment in France

- leading actor of cloud computing

proximity

- historical partner of local authorities in France

- presence in 166 countries

innovation

- 7 500 patents worldwide

- 5 000 researchers

- worldwide network of 18 Orange Labs

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smart cities | our priorities

our priority is to develop interactions with major players in the urban ecosystem.

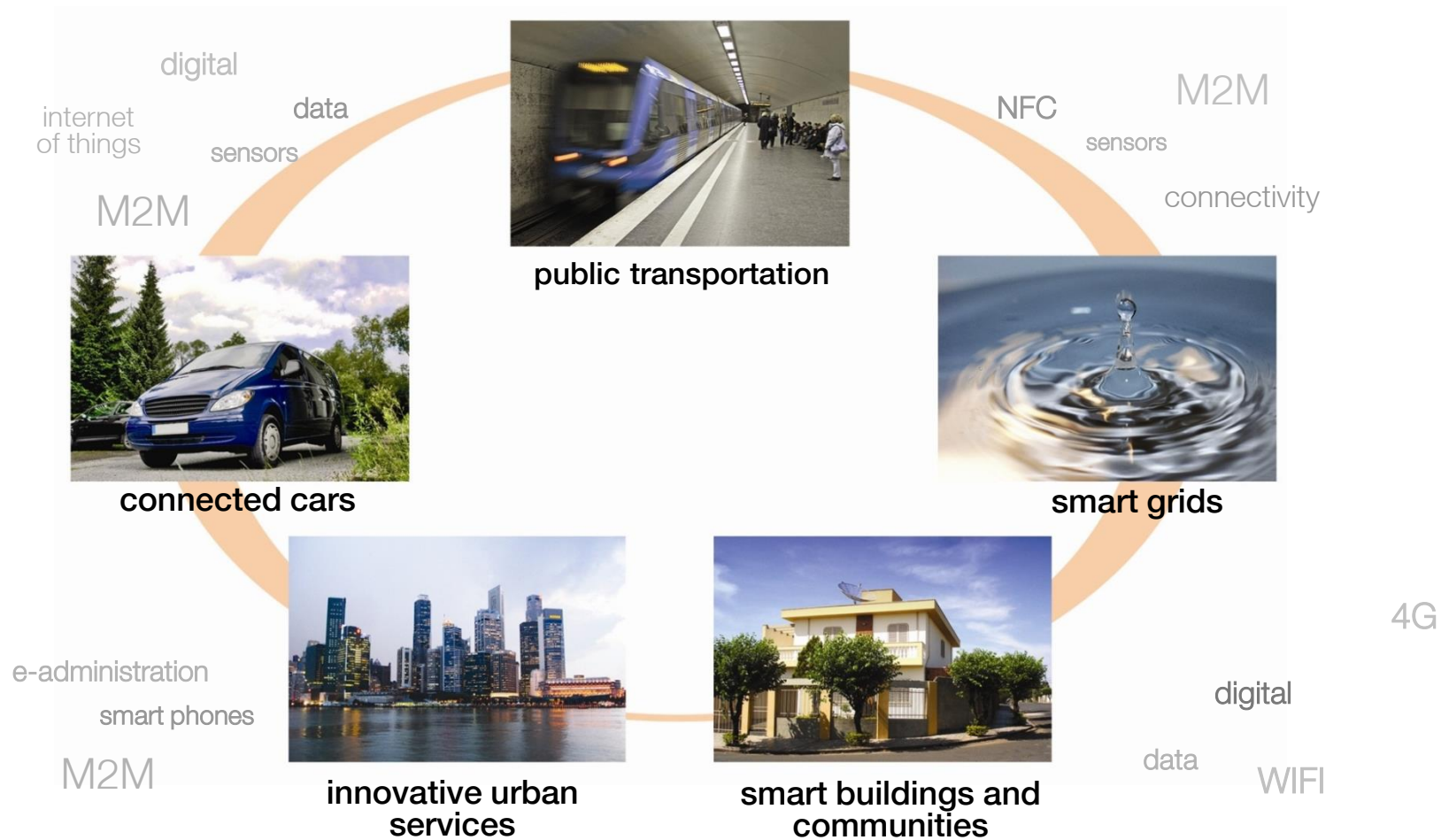- **accelerate our diversified partnership strategy with the city actors, the industries and innovative start-ups**

- **target the major functions of the city: to identify, qualify, transform their purposes into concrete projects**

Citizen itinerary and relations between city and inhabitants, visitors	public transportation, new mobility
culture and tourism	roads, trafic, parking
attractiveness and economic development of territory, commerce, new forms of work	«technical» services: energy and fluids, waste collection, street lighting, street furniture
performance of 'city' company, transverse maneuvering	energetic performance

local / regional
France/international

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smart cities | five areas of focus

digital

internet of things

data

sensors

M2M

public transportation

connected cars

NFC

M2M

sensors

connectivity

smart grids

4G

e-administration

smart phones

M2M

innovative urban services

smart buildings and communities

digital

data

WIFI

smart cities | our latest achievements

France

smart meters with M20 in Ile-de-France

Wifi on TGV Est

smart meters with M20 in Havre

transport NFC service in Strasbourg

Wifi 4G bus in Nantes

smart parkings with Streetline

personal assistant for citizen in Bordeaux

touristic flow management in Bouches du Rhône

natural risk management in Alpes-Maritimes
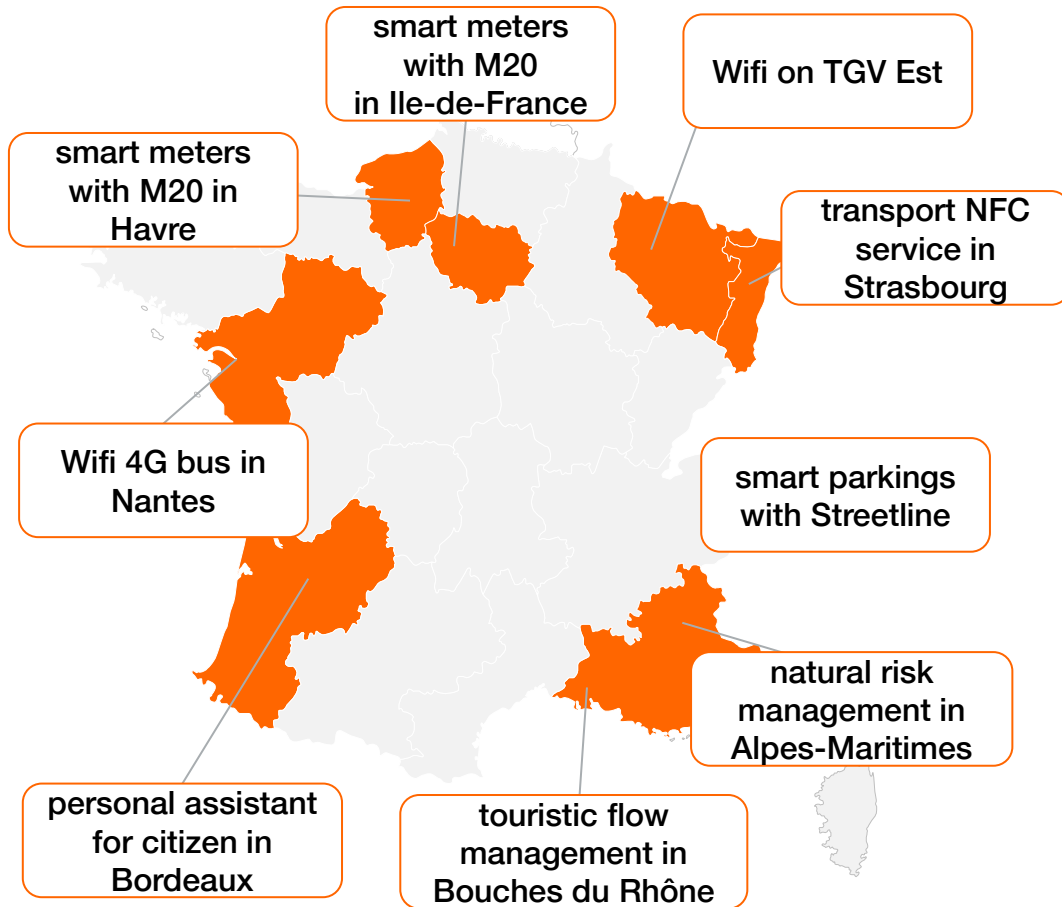
Middle East

- participate in various smart city projects in the Middle East and Gulf countries through support of local telecom and IT developers.

and tomorrow…

- the transformation of the cities, a background trend: political representatives have become aware of it and have started dealing with it
- Orange's ambition is to be the long-term digital partner of cities
- our strategy: to continue to invest in structuring networks, solutions and R & D in open innovation, by paying close attention to new uses and needs of citizens

what could be the everyday life in the smart cities of tomorrow?

billions of connected devices that can also tell their story (tags) and exchange with one another

cars without driver, communicating with one another and with the road infrastructure

nano-sensors for e-health development

generalized smart grid to better manage energy resources and limit CO_2 emissions

… and a lot of new applications that we haven't imagined yet today…

merci