





Report 2014

smart city expo



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Beyond urban growth Rethinking the future city

Smart City Expo World Congress (SCEWC) has become the leading event in the smart city industry. The 2014 edition recorded its best-ever figures with 10,838 visitors, 3,661 delegates, 275 exhibitors and 370 speakers coming from 92 countries and 440 cities to share the latest thinking on current and future issues related to urban growth.

They all met and networked in a 20,000 m² venue divided into two distinct areas:

The exhibition area, which was the global marketplace for all stakeholders involved in the development of smart cites.

The congress area, where leading experts discussed how to make cities more efficient, manageable, sustainable, and above all livable.

Citizens were invariably at the **center of most debates** on city planning, citizen engagement, social development, smart energy, big data management, the Internet of Things, and mobility infrastructures.

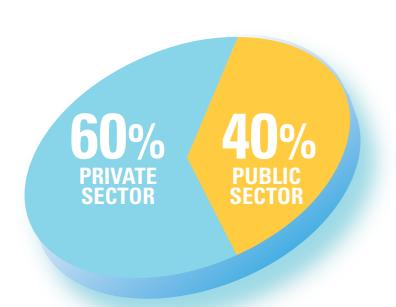
Questions arousing the visitors mind, found innovative solutions at the **Smart City Plaza**, where different companies showcased their latest developments in the field of smart technology. These environmental and economic issues, constitute a great business opportunity for a market expecting to reach 27.5 billion dollars by 2023*.

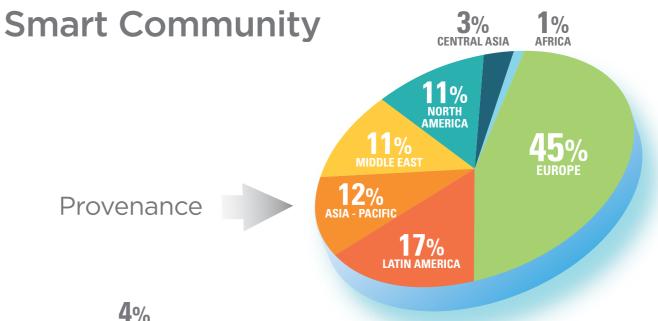
(*SOURCE: Navigant Research, "Smart Cities," July 2014)

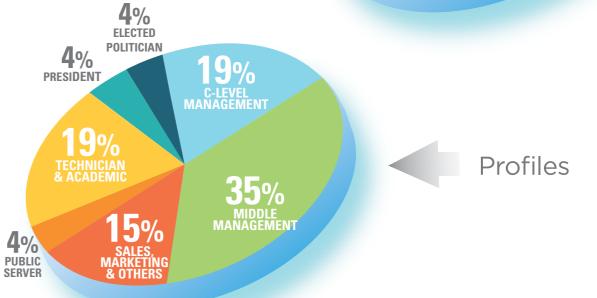






















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A global stage for worldwide cities and companies

The venue exhibited **275 companies** (41% increase compared to 2013) to showcase the most innovative, efficient, resilient and livable solutions for cities gathering leaders, experts and big decision-makers around the globe, in one place.



ortiners



Global Partners

This could only have been possible thanks to our partners and supporters.



For more than 100 years, the FCC Group has been providing smart services to improve the citizen's quality of life in collaboration with city governments and public institutions.

Present throughout the five continents, it works on a daily basis to make the objectives of a smart city a reality. It does this through its three lines of business: infrastructure management, environmental services and comprehensive water management.

Sustainability, Innovation, Optimisation, Technology, Proximity and Commitment are the key concepts that define FCC's proposal for Smart Cities, with a clear emphasis on quality citizen services.

www.fcc.es



Abertis Telecom is one of the leading independent infrastructure operators for wireless broadcasting telecommunication in Europe.

It offers a site-leasing service for telecommunications operators - mobile telephone operators-, and provides highly advanced audiovisual services to broadcasters at local, regional and national level.

It also develops solutions in the field of "smart city" projects that optimise services to the citizen via networks and services that facilitate municipal management. In this area, Abertis Telecom is deploying a network of intelligent communications that permits a connection between objects, and therefore the development of a solid ecosystem for the Internet of Things (IoT) in Spain.

www.abertistelecom.com



Helping Cities Envision the New Global Urban Services Industry.

The vision for smart cities offered by Cisco is of an integrated urban information and communication technology (ICT) overlay on a city that can support delivery of connected urban services and allow for efficient management of those services on a global scale.

Cisco helps cities gather, share, understand and act on data from and with other agencies, from and with city residents and visitors, and from and with business and social organizations.

By leveraging the Internet of Everything, cities can integrate people, processes, data and things to create safe and vital places to live, work, learn and play.

www. cisco. com/web/strategy/docs/smart-cities-expo-barcelona.pdf



Expo Milano is a unique event.

That combines a non-commercial Universal Exposition with an open process of dialogue between international players to exchange views on pressing challenges like nutrition and the resources of our planet. This is indeed the central theme that has been chosen as the baseline of the event: "Feeding the Planet, Energy for Life".

The Expo, which will be running from May, 1st to October, 31st 2015, in a giant exhibition site covering more than one million square meters, will host over 140 participating countries showing the best of their technology to promote innovation for a sustainable future.

www.expo2015.org



GDF SUEZ is a global energy player and an expert operator in the three key sectors of electricity, natural gas and energy services.

The Group supports changes in society that are based as much on economic growth as on, social progress and the preservation of natural resources.

The economics of buildings in the city of tomorrow, the free flow of networks in the sustainable city, the security and sharing of urban spaces, real-time management of connected cities... and many other topics. GDF SUEZ uses its specialist expertise to consider major urban projects at the earliest-possible stage, and provide practical support for city authorities.

www.gdfsuez.com



Cities everywhere are reinventing themselves.

They are reimagining essential systems, infrastructure and service delivery to promote growth, sustainability and enhanced quality of life.

Cities are better integrating across functions, capitalizing on new insights, creating systemwide efficiencies and collaborating in new ways to turn challenges into opportunities while building the strong, differentiating identities that attract new citizens and businesses.

Combining world-class business, industry and technology expertise, IBM provides the integrated solutions that help visionary leaders achieve their objectives. Drawing on thousands of client engagements and proven strength across the breadth of city operations, only IBM offers the experience that today's challenges demand.

www.ibm.com/smarterplanet/us/en/smarter_cities/overview



Indra is the premier Information Technology Company in Spain and a leading IT multinational in Europe and Latin America.

It is ranked as the second European company in its sector according to investment in R&D&i with more €550 M during the last three years. In 2013 revenues reached €3.000 M of which a 60% came from the international market. The company employs more than 43.000 professionals and has clients in more than 138 countries.

Innovation as a driving force. We offer in Smart Cities an integrated response to the new global challenges faced by cities.

www.indracompany.com





Partners



Founded in 1975, Microsoft (Nasdaq "MSFT") is the worldwide leader in software, services, and solutions that help people and businesses realize their full potential.

Microsoft CityNext empowers people - whether governments, citizens, or businesses - to transform their cities and their future and harness the potential of all city residents to create healthier, greener, and more prosperous communities.

Through CityNext, people can take advantage of a broad portfolio of products and technologies, a global network of partners, and a long track-record of successful education and social programs.

www.microsoft.com/citynext



Oracle's Smart City Platform offers a comprehensive range of solutions addressing the ever-increasing need to provide businesses and citizens with transparent, efficient and intelligent engagement with local government.

Oracle's platform provides all the ingredients needed to establish a Sentient City Network, providing city officials with a unified view of all aspects of city operations, quality of life, city initiative results/impact and feedback from residents.

The development, implementation and refinement of such a multi-channel, single point-of-contact platform for all government organizations lays the foundation for a range of additional capabilities including business recruitment and retention, improved management of civil contingencies and emergency disaster planning.

www.oracle.com/goto/smart-city-platform



SAP Urban Matters - Helping cities simplify to run at their best.

Cities are facing the greatest economic, social and technological changes in history Citizens, private industry and governments need to adapt swiftly and transform to better serve them.

SAP solutions help cities transform and prosper with solutions that helps improve livabity, transform government and grow economic prosperity.

Manage people and talent, plan budgets and finance, improve procure-to-pay processes, empower employees, and analyze data to make more informed decisions, and accelerate key business processes with industry-specific solutions with SAP, "Urban matters".

Cities can run better, help make it easier for businesses to thrive, and provide a safe environment for citizens. Match your business needs with SAP's solutions by visiting the SAP's Urban Matters solution map.

http://go.sap.com/solution/industry/public-sector.html



As a global specialist in energy management with operations in more than 100 countries.

Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in utilities & infrastructure, industries & machine manufacturers, non-residential buildings, data centers & networks and in residential.

Smart cities provide an important focus point for the cross-industry capabilities of Schneider Electric. The combination of deep infrastructure expertise and intelligent software systems provides the company with the ability to deliver a distinct set of solutions to improve urban efficiency. Our offering covers the core elements of a smart city, encompassing: Smart buildings and homes, Smart energy, Smart mobility, Smart water, Smart public services and Smart integration.

With more than 200 projects on SC already implemented around the world making Schneider Electric a very legitimate and credible player in the Smart City space.

www.schneider-electric.com



Enhancing the citizen experience to offer innovation for Smart Cities.

Technology helps cities transform into places that offer a better quality of life. In this transformation, Telefonica aspires to play an active role and to be constantly involved as a contributor and collaborator both with public institutions and the private sector in order to build cities that are efficient, humane, and sustainable. We convert cities into places full of possibilities.

We are experts in not only providing the best connectivity but also in creating memorable customer experiences and drawing key customer insights in order to make strategic decisions. Upholding EU objectives, we support an open ecosystem through FIWARE in order to enrich the user experience and provide innovation.

Telefonica presented solutions in mobility and transport, sustainability and environment, citizen services and security, and economy and competition.

m2m.telefonica.com/smart-cities/smart-cities



ThyssenKrupp Elevator is one of the world's leading elevator companies and it brings together the ThyssenKrupp Group's global activities in passenger transportation systems.

With sales of 6.4 billion euros in fiscal 2013/2014, customers in 150 countries, and with more than 50,000 highly skilled employees, the company offers innovative and energy-efficient products designed to meet customers' individual requirements.

The portfolio includes passenger and freight elevators, escalators and moving walks, passenger boarding bridges, stair and platform lifts as well as tailored service solutions for all products. Over 900 locations around the world provide an extensive sales and service network to guarantee closeness to customers.

www.thyssenkruppelevadores.es









Supporting Institutions

We have to thank all public and private institutions that have supported and taken part in this event.



ICEX España Exportación e Inversiones is a public entity operating nationwide.

Whose mission is to promote the internationalization of Spanish companies to make them more competitive and add value to the overall economy while it also seeks to attract foreign investment to Spain. It delivers its services through 31 Provincial and Regional Trade Offices in Spain and nearly 100 Economic and Trade Offices overseas. It also has 19 Business Centers abroad which provide Spanish companies with temporary facilities as internationalization incubators.

www.icex.es



The Red Española de Ciudades Inteligentes (Spanish Network of Smart Cities - RECI).

Was formally constituted in June 2012 and is now an international benchmark in its field. Its purpose is to exchange experiences and work together to create dynamics between cities that promote automatic and efficient management of infrastructure and urban services, reducing public spending and improving the quality of services, thereby attracting economic activity and generating progress based on innovation, knowledge and ICT. At the last SCEWC it held a number of briefing sessions to publicize the progress made by its five working groups.

www.redciudadesinteligentes.es



The UK is taking the lead in becoming the smartest country in the world, with innovative companies providing cutting edge solutions to cities and people.

The UK Government has established the Smart Cities Forum to help coordinate national and international initiatives across industry, national and local Government, academia and society, because they want Britain's cities and companies to stay ahead of the curve in smart technologies internationally.

The Future Cities Catapult, established to accelerate UK adoption and awareness of smart cities, developed a Cities Lab to provide international cities with data analysis and simulation services.

The British Standards Institution (BSI Group) published the first Smart Cities Standards in early 2014 and plans further standards developments shortly.

www.events.ukti.gov.uk/ukti-at-the-smart-city-expo-world-congress-/page/index/



The Government of Catalonia had a corporate booth running 20 projects ranging different strategic sectors.

At the booth, 36 presentations hosted 18 Catalan smart companies and technology centers. ACCIÓ held a brokerage event with 391 companies that conducted a total of 863 meetings. The congress also saw the presentation and launch of SmartCAT, Catalonia's smart strategy.

web.gencat.cat



Diputació de Barcelona, as the Provincial Council, provides financial and technical resources to the 311 municipalities in its area to support them in the process of becoming smart cities.

In the exhibition area Diputació de Barcelona has shown major Smart region projects in which is involved (open data, new apps, books...). Projects from nine municipalities and local authorities have also been shown: Castelldefels, Igualada and Viladecans (parking app); Centelles (optical fiber); Mataró (instant messaging); Osona Energy Local Agency (monitoring energy consumption in schools); Rubí (energy saving); Sant Feliu de Llobregat (smart accoustic traffic lights); Viladecans (smart grid); Vilanova de Sau (biomass heating system).

Provincial Council Members Carles Rossinyol and Mercè Rius have participated in two Congress sessions.

www.diba.cat



The World Bank is like a cooperative, made up of 188 member countries.

These member countries, or shareholders, are represented by a Board of Governors, who are the ultimate policymakers at the World Bank. Generally, the governors are member countries' ministers of finance or ministers of development. They meet once a year at the Annual Meetings of the Boards of Governors of the World Bank Group and the International Monetary Fund.

The governors delegate specific duties to 25 Executive Directors, who work on-site at the Bank. The five largest shareholders appoint an executive director, while other member countries are represented by elected executive directors.

www.worldbank.org



UN-Habitat is the United Nations programme working towards a better urban future.

Its mission is to promote socially and environmentally sustainable human settlements development and the achievement of adequate shelter for all.

UN-Habitat provides answers and achievable solutions to the current challenges faced by our cities. It works to ensure that cities become inclusive and affordable drivers of economic growth and social development.

In October 2016, the United Nations will hold the Conference on Housing and Sustainable Urban Development in Quito, Ecuador. The Conference is to reinvigorate the global commitment to sustainable urbanization and to focus on the implementation of a New Urban Agenda.

www.unhabitat.org



Partners



UITP (International Association of Public Transport) is a passionate champion of sustainable urban mobility and is the only worldwide network.

To bring together all public transport stakeholders and all sustainable transport modes. UITP stands for 3 missions:

ADVOCACY: UITP engages with decision-makers, international organisations and other key stakeholders to promote and mainstream public transport.

KNOWLEDGE & OUTREACH: UITP generates and share cutting-edge knowledge and expertise.

NETWORK & BUSINESS: UITP brings people together to exchange ideas, find solutions and forge mutually beneficial business partnerships.

The Association has 1,300 member companies with over 14,000 contacts from 92 countries. Members are public transport authorities and operators, policy decision-makers, research institutes and the public transport supply and service industry.

www.uitp.org



Mobile World Capital Barcelona (MWCB) is an initiative to make Barcelona a benchmark for mobile transformation.

Its aim is to generate the optimum conditions for companies and agents from different fields to carry out this transformation, and that this will result in an impact on the territory. MWCB is an instrument that should act as an engine for development and internationalization of the whole business of Barcelona, Catalonia and Spain.

The broad integration of new technologies and mobile solutions into people's lives is transforming whole societies and economies, and the change has just started.

mobileworldcapital.com



Hosted by

Barcelona's City Council, is continuously improving the urban space.

Laying out technology to benefit citizenship in order to ensure their quality of life and to be able to keep on advancing as an environmentally friendly Smart City. Thanks to its intersecting strategy including 22 programs and over 200 initiatives that leverage ICT's full potential, the city is able to integrate innovative management and service solutions to promote economic growth and facilitate the life of its citizens.

www.barcelona.cat



Organized by

A leading trade fair organization

Fira de Barcelona is one of the most important trade fair organizations in Europe, in terms of its size and quality, the scale of its exhibition areas and venues, its comprehensive logistics and organizational experience, and its professionalism and leadership. It is one of the finest platforms to do business, share knowledge and hold major international events, twinned with the unmatchable Barcelona brand, one of the most dynamic cities in Europe.

www.firabarcelona.com













Real solutions to shift innovation

We recreated a real **smart city** in a 2,000 m² space at the very center of the exhibition area with a city hall (protocol room), a **speakers' Corner**, a **working area**, a cafe, a **library** and a **tourist office**, addressed to attendees to **showcase real-time solutions** from the "Call For Solutions" initiative and our partners.









Call for Solutions

The Smart City Plaza welcomed the seven proposals from the Call for Solutions initiative (organized by SCEWC) aiming to choose advanced solutions for entrepreneurs, research centers, start-ups and small or medium sized businesses (SME) related to at least one of the Congress tracks.

The winners had the opportunity to showcase their solutions at the hot spot area of the exhibition.

CAMUYDE - Agora:

An eco-friendly piece of urban furniture designed to integrate technological solutions, to create a gathering place (urban living rooms) within smart cities.

COOLING INNO - Airtower:

The first passive air conditioning unit that does not require an external unit.

D4SC - Citizen Canvas:

A data-mapping tool to improve stakeholder collaboration by visualizing, analyzing and mapping together new smart city services.

DEA DRONES - "Ambulance" drones:

To help healthcare emergency systems to arrive faster to alerts, optimize their resources and provide better services to citizens via telemedicine.

ITGLAS - Smart Citizens app for Google Glass:

A smart citizen app for Google Glass which interacts in real-time with the user displaying all the solutions and new products at the venue.

SITUATE - Street charge:

A solar-powered charging station with built-in USB ports and charging tips.

TACSE - Smart Traffic Light:

A system that integrates non-invasive sensors capable of collecting parameters related to vehicles, pedestrians, and environmental conditions.

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Partners' Solutions

ABERTIS TELECOM

Barcelona Wifi

A service which allows citizens in Barcelona, access the Internet through Wi-Fi network with more than 700 hotspots.

SmartBrain Platform

A platform that provides an integrated and transversal tool shared by all public services, to manage all available data for the City Council to improve its management of each and every one of its services.

IBEACONS

A smart application for Android, to share data on Fira de Barcelona attendees journey in the venue, to gain insights from attendees them.

CISCO

Next-Gen Crowd Management Dashboard

A management dashboard, which combines raw data and an unprecedented array of analytics, to help cities improve operations and better manage crowds.

NetSense Multi-Sensor Node Demonstration via PHILIPS LED Lighting for Industrial IoT

A city lighting infrastructure which transforms into a distributed sensing platform for Smart City applications.

FCC

Innovative electric water spraying vehicle

An innovative spraying tanker, that combines electrical and diesel power to perform its street cleaning task.

INDRA

iSGI - Urban Enforcement Back Office

A back office platform which helps cities to apply new and creative mobility policies based on enforcement data to reduce congestion and promote public transport.

iCAR

An end-to-end solution that includes the entire range of Indra products related to support infrastructures for the electric vehicle roll-out.

e-Ticketing Driver Console

A console to sell, top up and validate transport tickets, as well as configure and compile data from the external validation machine for later wireless transmission (GPRS or WLAN) to a control and ticketing management centre.

On-board Control Unit Nauta-BSV

An advanced CAD/AVL control unit, that provides positioning, data processing, communications, data storage, and integration functionalities amongst others.

MICROSOFT

ReliaSENS by Eurotech

A smart device for environmental sensing which offers a simple interface to manage the device and access its data.

New Generation Connected LED luminaires

A four Iridium 3 LED intelligent luminaires with an optical and heat management web-based platform.

SCHNEIDER ELECTRIC

EcoTrafiX, the smart mobility

A traffic management solution to help cities and highway operators to make mobility efficient, safe, and sustainable.

Schneider Electric, the smart integration

An integrated operational technology and IT system, for optimizing services and maximizing efficiency across the city.

THYSSENKRUPP

ThyssenKrupp City. A virtual trip into real solutions

A virtual recreation of a hypothetical model city of the future which integrates a wide variety of ThyssenKrupp solutions.

NISSAN

Nissan e-NV200: electric vehicle solutions for profesionals

An electric vehicle solution for city dweller profesionals.

AJUNTAMENT DE BARCELONA

Bicing elèctric

An electric bicycle service scheme, which complements the current Bicing service in Barcelona.

Emakers

A courier network for e-commerce delivery.

CEIIA

SMART CHARGING V2

A solution to increase significantly the amount of renewable energy sources and use renewables definitively and efficiently in transport.

E-Scooter Sharing

A project which contemplates six support units and ten charging stations each with ten 220V plugs, for every type of electric vehicle - bikes, scooters and autos.

BIG BELLY

Big Belly

Smart waste and recycling stations which collect data through their network of cloud connected smart bins, to provide real time information to their partners.











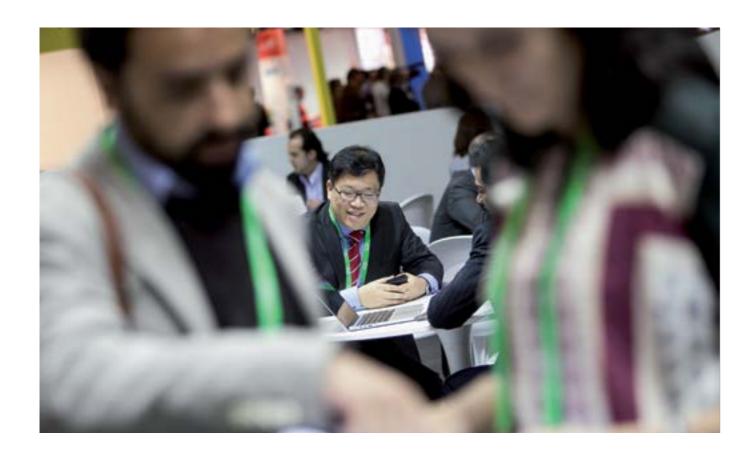
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Major networking opportunities

As part of the Smart City Expo World Congress, a series of strategic activities took place empowering companies in search of new partners, investors and ventures, as well as enhancing major corporations in the search for talent.







Job Marketplace

Looking for a job in the Smart City community?

Barcelona Activa, in collaboration with **Fira de Barcelona,** organized a recruitment networking
event, where candidates (pre-selected by Barcelona

Activa) had a chance to meet with company representatives who offered job opportunities.

Smart City Open Innovation Marketplace

The best innovative smart city solutions and new ideas.

Smart City Open Innovation Market-place (Smart City OIMP) offered a great opportunity for entrepreneurs, spin-offs, SMEs and technology centers to meet major corporations and large cities to present their work.

Large cities and **major companies** like Indra, Microsoft, IBM, FCC, Clear Channel, Abertis Telecom, Oracle, and SAP launched innovation challenges to the International Open Innovation Community looking for solutions and innovative ideas to solve them.

Brokerage Event

Improve your business growth opportunities.

SCEWC, together with **ACCIÓ**, the Catalan Government's business support agency, and the **Enterprise Europe Network**, which helps SMEs to make the most of business opportunities in the EU and beyond, organized the first edition of the Brokerage Event.

The aim of this matchmaking event was to help corporations, institutions, SMEs, start-ups, entre-

preneurs, universities and research groups find international partners for product development, manufacturing and licensing agreements, joint ventures or other types of partnership.

The event featured one-to-one, 30 minutes long pre-scheduled meetings where attendees could explore potential partners, supporters and opportunities to make their business grow.

1st Smart Cities Investment Forum

Get your idea up-and-running.

The 1st Smart Cities Investment Forum took place within the Smart City Expo World Congress and was co-organized by the **Association of Architects** of Catalonia, Barcelona Activa (Barcelona City

Council), in cooperation with **ACCELMED** (acceleration for Mediterranean Companies) and the **MED program**, to connect private investors with entrepreneurs, interested in business opportunities in the smart city field.

SynergyS

Identification of challenges and possible solutions.

The **SynergyS** activity aimed to identify key challenges and feasible solutions for enterprises in this area, with the ambition to create synergies and business opportunities between big corporations and local SMEs.

The challenges were proposed by companies and divided into three tracks: **Mobility**, (Nexus Geografics and Ros Roca); **Sustainability**, (Aqualogy, Grup Sorigué-Niu and Lavola); and **Technology**, (Atos Worldline, B:SM and Intergraph).





Internet of Things

The industrial perspective on Internet of Things (IoT) and smart cities opens up a new world of business opportunities.

With this in mind, a guidebook was published to find IoT breakthrough products and services among exhibitors.

Additionally, the Nano IoT Lab was organized, a

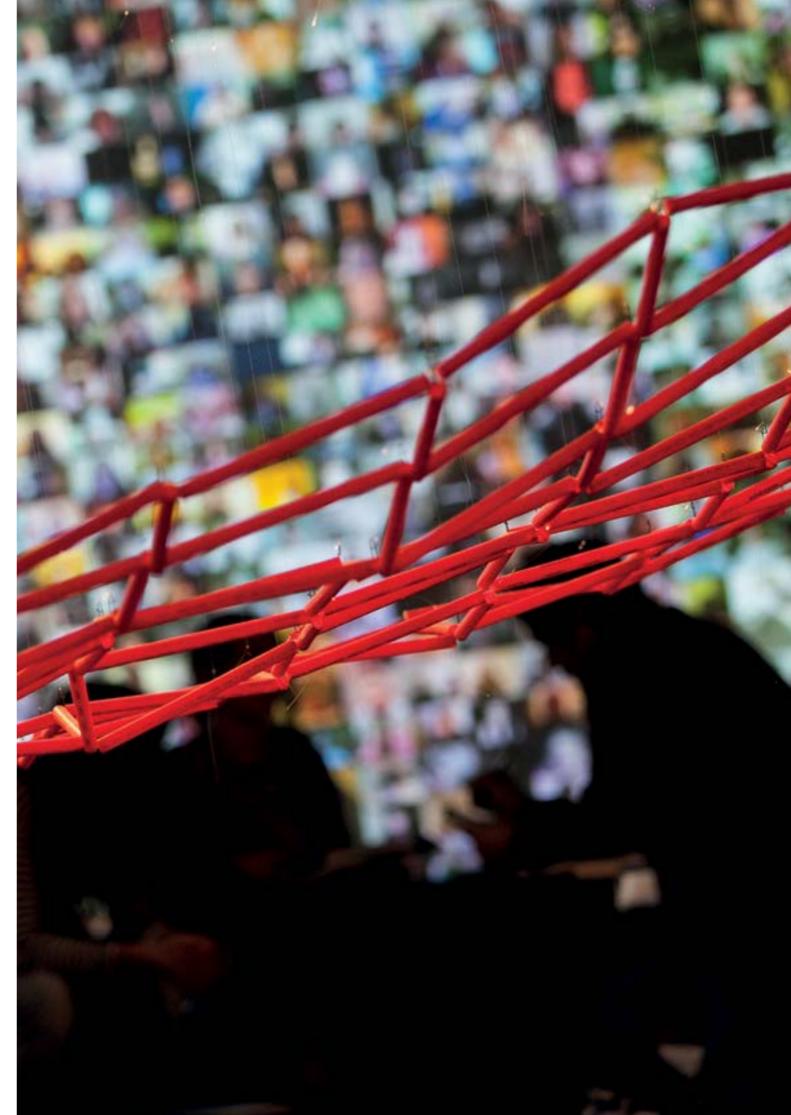
3-hour workshop where teams explored the various opportunities around the Internet of Things (IoT) with tools provided by Claro Partners.

Big Bang Data

A space devoted to the five senses and a break for reflection that explores the phenomenon of the information explosion.

The Big Bang Data space addressed several topics The exhibition was commissioned by Olga Subirós and strategies looking into the proliferation of larrrency? Is it an instrument for knowledge, efficiency and transparency or a means for mass surveillance?

and José Luis de Vicente and co-produced by gely Internet based information: is data the new cu- the Center of Contemporary Culture of Barcelona (CCCB) and Fundación Telefónica.











5

More innovation Focus on specific topics

As Smart Cities proliferate across the globe, it's easy to spot the key factors behind all this progress. It's strongly related to innovative, creative, and cutting-edge technology.





Innovation from the inside.

To help convene a global community to face critical challenges to make cities more accessible, manageable, communicative, and citizen-centered. The World Bank hosted hundreds of stakeholders including city and municipal leaders, urban and energy specialists, and technologists at the second annual CitiSense conference in Barcelona.

As a part of SCWEC, the conference helped attendees to learn how to implement new approaches for urban management focused on open innovation and developing practical solutions based on smart technologies.

www.worldbank.org/en/topic/ict/brief/citisense



Sharing an innovative spirit.

The City Innovation Summit was an excellent addition to the already established benchmark Smart City Expo World Congress Event.

Organized by the Barcelona City Council and Fira de Barcelona, the conference focused on how cities apply innovation to local governments and bridge between public and private innovation, social innovation and conceiving the city as a center point for innovation.

www.cityinnovationsummit.com



One concept, two realities.

Cities import energy, water, food, human capital, and export products, services, and large quantities of all kinds of waste.

The natural environment is both a channel and a source for urban flows. The urban world cannot exist without its rural counterpart. With this in mind, the Rural Smart Grids conference gathered experts from different fields to reflect on one concept and two realities: Smart Rural and the City.

www.ruralsmartgrids.cat







Cities and Colonial C





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Cities' and countries' delegations

Smart City Expo World Congress, was the meeting point for all cities around the world to tackle urban challenges, as well as sharing different visions and solutions towards becoming a more livable and sustainable city.





Cities' and countries' Find Funding exhibitors

Cities and Countries participated in the **Exhibition Area** to showcase their projects and promote their local companies.

City and country delegates organized meetings and presentations for companies through their established network (London, Boston, Milton Keynes, Copenhagen, Tel Aviv, Lyon, Barcelona, etc.).

Relevant projects

The most **relevant projects** on Smart Initiatives around the world were presented at the Smart City Expo World Congress by different cities and countries delagations.

Among others, the UK Pavilion, the Danish Pavilion and the Tel Aviv Pavilion showcased some of the best innovative practices within the field of smart cities.

Cities and countries attending the congress, established partnerships and different forms of collaboration with companies and institutions worldwide, in order to receive funding for various initiatives and projects.

Pavillions

- A Coruña
- Barcelona
- Beijing
- Brazil
- Catalonia
- Copenhagen
- Denmark
- Spain
- Goteborg
- Hospitalet de Llobregat
- India
- Israel
- Italy
- Korea

- Kumamoto
- Kyoto
- Medellín
- Milano
- Sabadell
- Sant Cugat
- Tarragona
- Tel Aviv
- United Kingdom
- Vicente López
- Yokohama











World Smart Cities Awards

The World Smart Cities Awards are for cities, businesses, entrepreneurs, research centers, public or non-governmental organizations, and consortiums (public-private) with an innovative Smart City vision and solution. The Awards fourth edition, received 120 submissions from 35 countries around the world.



SMART CITY EXPO WORLD CONGRES

City Award

The **City Award** considers a global strategy developed by a city that ideally combines projects, initiatives, and policy implementations in two or three Smart City fields.

In 2014, the city of **Tel-Aviv** won this award, thanks to embracing technology-driven improvements (citywide WiFi and location-based smartphone tools) and public engagement strategies (city square roundtable discussions and participatory budgeting).

The award recognized Tel-Aviv's firm commitment towards a new and more direct model engaging citizens. The jury panel pointed out positively the rollout of the DigiTel model, a platform transforming the Israeli city into a smart city benchmark and a pioneer in new models of public engagement.

www.tel-aviv.gov.il/eng/residents/Pages/ResidentCard.aspx?t-m=1&sm=47

Project Award

The **Project Award** considers the most innovative and successful projects developed in a specific Smart City area.

In 2014, the award went to **Denmark**, with the project "Copenhagen Connecting: Driving Data to Quality Service – to the Benefit of Citizens and Businesses." The project develops an integrated approach to urban management, driven by socio-economic priorities, and focused on generating a comprehensive picture of the city and its needs using real-time data. The system is built on open standards and intelligent procurement to empower the most innovative solutions available.

www.copenhagenconnecting.com

Innovative Initiative Award

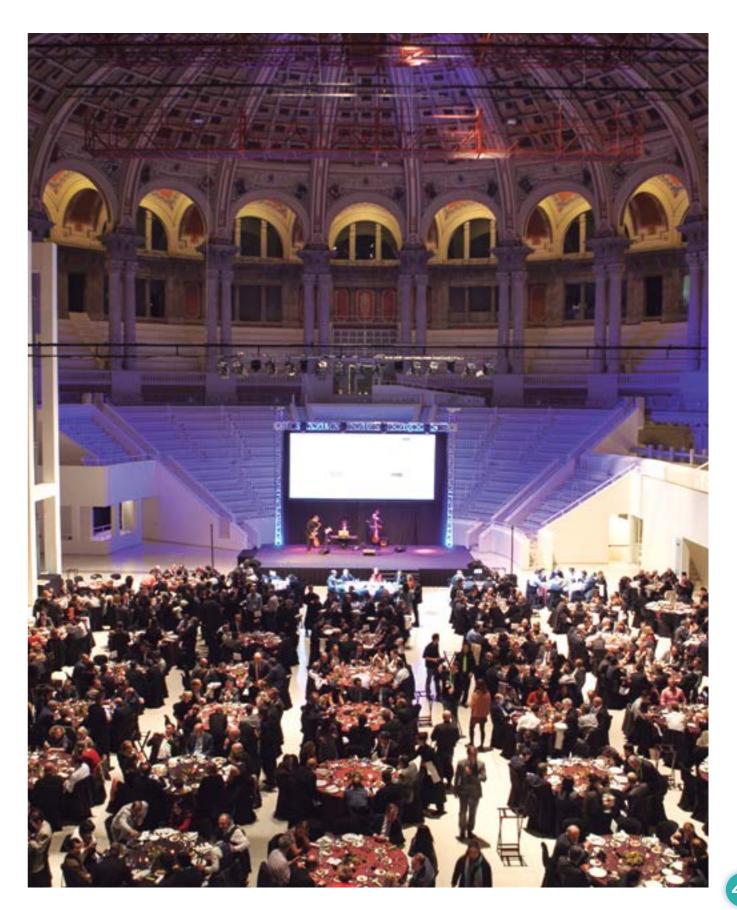
The **Innovative Initiative Award** considers the most innovative and successful projects developed in a specific Smart City area that are in an early stage of development or are particularly remarkable for their innovative social approach.

In 2014, the winner was the **OMOMI Initiative**, from Nigeria. Modeled after the WHO's Childhood Survival Strategies, OMOMI offers parents in Nigeria a set of mobile tools to monitor their child's growth, stay up to date on critical medical milestones, and share knowledge and support with other mothers and fathers in a networked community of users.

www.mobicure.biz

Gala Dinner

The panel and the winners of the World Smart Cities Awards were announced at the **Gala Dinner Award Ceremony**, held on November 19, 2014.











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A determinant look at the future of cities

Smart Cities are as much about new urban technologies that help manage cities more efficiently, as about changing people and institutional frameworks and processes, enabling cities to move forward efficiently.





Smart City Expo World Congress hosted proposals from experts and opinion leaders suggesting innovative solutions to develop sustainable, resilient, and communicative cities while placing society and the public at the center of the debate. The 2014 edition of the conference attracted 3,661 delegates (20% more than 2013) and 380 speakers who stressed the need to implement a 'new urban agenda' and contributed with their vision on the following topics.

"Nothing is smarter than improving the quality of life." Antoni Vives

(Deputy Mayor - Barcelona City Council - Spain)

By 2050, predictions suggest that about 86% of developed countries and 64% of those developing, will be urbanized (source: UN). With more people flocking to cities, there is an urgent demand for smarter and more sustainable cities. But what does smart really mean? Can we imagine cities that change the world?

Smart Society

#empower #engage
#apps #appsforsociety
#citizenservices
#socialinnovation
#socialwellbeing

Smart Cities,

Change

the World

#climatechange

#storage

#zerocarbon

#green #efficiency

#energyinfrastructure

"Civic innovation is about inventing how government and citizens come together." Gabriella Gómez-Mont

(Chief Creativity Officer Laboratorio para la Ciudad Mexico

Information and inclusion are key assets for the future development of cities. Smartness is how cities take decisions, how cities use their resources, and how inclusive and collaborative cities are. Smartness is technology enabled but it is not technology driven or technology itself. People are the ultimate and most important

Energy

#green #efficiency
#climatechange #storage
#energyinfrastructure
#zerocarbon

"If we're to have a sustainable future we need to integrate renewables and be able to store energy."

Donald Sadoway

DF. Mexico)

part of cities.

(John F. Elliott Professor of Materials Chemistry, MIT, USA)

The landscape for the energy sector is changing. To bring a sustainable future, not only infrastructure has to transform, but also the way people think of energy. Consumers are in a demanding shift, asking for a new energy model, environmentally and economically sustainable, making better use of local scale and renewable resources, while having a global focus, and a strong partnership between governments and companies.

Technology

#integration #connect #data #services #integration #loT #cloud #apps

Mobility

#share #integrate #decarbonize #intelligent #transportsystems #publictransportation

Sustainable City

#resilience #regenerate #transform #water #wastemanagement #security

Governance

#open #collaboration #development #entrepreneurship

"Internet of Things = Internet of Contents + Internet of people."

Guy Danon

(Industry Director, Local & Regional Government SAP Europe, Middle East & Africa Paris, France)

In the digital economy, data is the new currency and it will become a new urban service like water or electricity. This technological revolution is an opportunity for real change in how cities are operated and therefore a new way to look forward for economic and social development.

"A Major challenge for mobility is integration and how can we use technology to make it more inclusive."

Luis Reis

(Mobility Business and Innovation Manager CEIIA, Maia, Portugal)

Transportation is one of the main sources of CO² emissions world-wide. Space wise, cars also challenge the urban context, as cities have limited availability of public space to sort out everyone's mobility needs. In this context, there is an urgent need to shift mobility towards electric, to make better use of all means of transportation, and improve them thanks to new data driven technologies.

"City resilience implies bringing together the vision from all stakeholders: citizens, private companies, and government."

Xavier Martin Garriga

(Director of FCC Environment Barcelona and Balears FCC - Spain)

Cities are our future, but their footprint is a heavy contributor to the un-sustainability of life on the planet. Therefore, we need to embrace a holistic approach to urban sustainability that focuses on creating more resilient cities through the integration of environmental, social, and economic well being. Future cities need to be more autonomous, adaptive, and collaborative between each other to resolve common challenges.

"The base of Open Governance is a participative culture."

Anibal Gaviria

(Mayor, City of Medellin, Colombia)

Many challenges for improving life in cities lie within the political domain. Citizens are becoming more demanding while city resources are diminishing. To tackle this challenge, one of the key strategies is collaboration and partnership with the citizens, the private sector, NGOs, academia and numerous other stakeholders. By generating the right conditions for creativity, innovation, and collaboration, cities can foster social development.



SMART CITY EXPO WORLD CONGRESS

Smart Cities, change the world



18/11/2014 / 9:30-10:30

SPEAKERS

Antoni Vives / Deputy Mayor - Barcelona City Council - Barcelona - Spain

Anibal Gaviria / Mayor - City of Medellin - Medellin - Colombia

Venkaiaha Naidu / Union Minister for Urban Development - Government of India - New Delhi - India **Jerry MacArthur Hultin** / Senior Presidential Fellow and President Emeritus - Polytechnic Institute of NYU - New York USA

CHAIR

Mike Lake / President & CEO - Leading Cities - Boston - USA

By 2050, 2.8 billion people will be living in urban areas. What kind of cities will we have created by then? This base line was the thread that ran through the inaugural session of the 2014 SCEWC. Jerry M. Hultin, addressed attendees to keep in mind this statement, emphasizing that today's cities will need to be rebuilt, and new cities built from scratch, to accommodate this incredible growth.

The other speakers echoed this sentiment. Anibal Gaviria unveiled Medellin's new development strategy, founded on security, transparency, participation, innovation, and resilience. He also highlighted the fact that several of Medellín's successes were supported thanks to the collaboration with the city of Barcelona, and emphasized the importance of any opportunity for two or more cities to share knowledge and collaborate on urban development.

Venkaiaha Naidu stressed the importance of democratic forms of participation in city planning. And emphasized the importance of involving citizens in the development process, in order to attain support and cooperate in implementing new and innovative policies. To achieve this formidable goal, India is prioritizing public-private partnerships, mass public transit, and sustainable techniques. Minister Naidu pointed to the experience of Barcelona and other European cities as models for how India can pursue growth while also prioritizing the preservation of historical cities and sustainable policies. Eventually, Antoni Vives emphasized that the most important element of the work being done by all attendees, is the motivation to create a better quality of life for the residents of cities across the globe and underlined three key urban priorities for Barcelona: the democratic process, wealth generation and distribution, and environmental conservation.

The future of globalisation



19/11/2014 / 9:30-10:15

KEYNOTE

Parag Khanna / Global strategist, Best-selling author and Managing Partner - Hybrid Reality Institute - Singapore Singapore

INTRODUCED BY

Mike Lake / President & CEO - Leading Cities - Boston - USA

Many people forecasted the end of globalization after 9/11, the collapse of the Doha round of global trade negotiations, and the after effects of the financial crisis. In all of these moments, the forces of globalization rebounded completely. Even though today the end of globalization is considered to be imminent by those concerned by the rise of state capitalism and the near-shoring of labor and production in response to new technology. Khanna argued that, in fact, globalization has been a 60,000-year process that is still on the rise. Instead of ending, globalization is entering its fifth phase, which is characterized by the ubiquity of new technology and the decentralized nature of the global marketplace.

Despite the collapse of the World Trade Organization and the financial system, globalization has just begun. 33

Khanna pointed out several reasons to think that a new way of doing business can be done in the near future. The first is the unprecedented shift from investing in defense to predominantly invest in infrastructure spending, as new and existing cities work rapidly to keep up with population growth. The priority today is on using trade and interdependence to address this expansion, instead of violent conflicts.

Another factor is the growth of urban archipelagos: vast, interconnected swaths of cities that comprise tens of millions of inhabitants. These places are the real drivers and foundation of the global economy, and are much more interested in connecting, trading, and building markets, than in fighting one another.

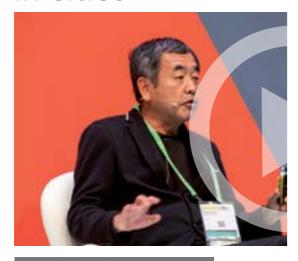
The rise of supercities and urban archipelagos further fuels the devolution and decentralization of nation states, and instead city-states have become the building block of the global economy. With this shift underway, and with an ever-increasing emphasis on interdependence, Khanna forecasts an explosion of globalization and not a deceleration.



Keynnotes



The creative process in cities





19/11/2014 / 17:15-18:00

SPEAKERS

Kengo Kuma / Professor - Tokyo University - Tokyo - Japan **Deyan Sudjic** / Director - Design Museum - London - UK

CHAIR

Anatxu Zabalbeascoa / Journalist & author - El Pais - Madrid - Spain

Kengo Kuma developed the idea that smart techniques can take many forms. He pointed out the experience of Japan following the devastating effects of the earthquake and tsunami that occurred in 2011. In the wake of the destruction, many of the older buildings remained standing because they were constructed in places known to be safer than others.

Similarly, he described how using traditional materials like earth for construction can eliminate the need for artificial technologies such as air conditioners because they can be used to naturally moderate temperature fluctuations.

For me a keyword for smart city is 'smallness'. Kengo Kuma

He also stood up for the concept of 'smallness' as an open door to new design, architecture, and urban planning possibilities.

Meanwhile, Dejan Sudjic took a more critical view of the term 'Smart City'. He argued that 'smart' relies too heavily on prefabricated solutions and worried that cities eliminate key parts such as spaces for accidental occurrences, and a collection of opportunities that residents can choose to engage with or ignore. He acknowledged that technological advancement is inevitable and unstoppable, and that we wouldn't likely want to stop such advances even if it were possible to do so. He acknowledged that disruptions caused by new technology have positive and negative implications, and society and governments have to balance the equation.

Furthermore, he stressed that cities are not like works of art but a highly complex ecosystems, and should be approached in the same way as with weather systems: try to predict the rain, but don't expect to make it rain.

Exploring how cities operate is fascinating because we essentially explore ourselves. JJ

Deyan Sudjic

Imagining cities that can save the planet



20/11/2014 / 16:15-17:00

KEYNOTE

Alex Steffen / Planetary Futurist in Residence - IDEO, Design and Innovation Company - San Francisco - USA

INTRODUCED BY

Eugenie L Birch / Lawrence C. Nussdorf Professor of Urban Research and Education - Penn University - Philadelphia - USA

More people and less cars can mean livability. 33

Alex Steffen is convinced that "we have to build better cities to beat the planetary crisis we face."

The American futurist, who writes and speaks about sustainability and the future of the planet, underlined that the world has to cope with population growth and global energy use. We are about to peak on population growth on a moment that we are urbanizing a city the size of San Francisco every 3 or 4 days.

The more carbon there is in the atmosphere, the higher temperature, and we have put a limit of 4 degrees increase as the top amount bearable.

That is our carbon budget, 800 gigatons of carbon. A target we cannot afford to meet. We will be there in 2032, at the current pace of producing carbon. Therefore, eventually, "we will live on a 100% renewable world, or not live", he said.

In this regard, the expert stressed on the need to get to a sustainable level before we get to our carbon budget, changing our fundamental relationship with the planet. He also explained that density, walkability and transit access, use of local energy, local water and zero waste, are strategic tools.

These concepts would help us get better prepared and more resilient regarding city vulnerabilities and create more opportunities to connect with other citizens being able to develop a sharing economy.



SMART CITY EXPO WORLD CONGRESS

Plenary Session 1 **Energy**

Making energy part of more efficient cities



18/11/2014 / 10:30-11:45

SPEAKERS

Donald Sadoway / John F. Elliott Professor of Materials Chemistry - Massachusetts Institute of Technology - Boston - USA

Michael J. Dixon / General Manager IBM's Global Smarter Cities Business - IBM - Armonk - USA Macon Cowles / City Council Member - Boulder City Council - Boulder - USA

Joost van Keulen / Vice-Mayor & innovation, economic and international affairs representative - Groningen Municipal Council - Groningen - The Netherlands

Reinhold Achatz / Head of the Corporate Function Technology, Innovation and Sustainability - ThyssenKrupp AG - Cologne - Germany

CHAIR

Samuel Furfari / Professor of Energy geopolitics - Free University of Brussels - Brussels - Belgium

About 80% of energy consumption takes place in cities. How can they best solve the problems of delivering energy when and where it is needed? Donald Sadoway pointed at energy storage as the potential breakthrough innovation that could revolutionize energy systems worldwide. For Michael J. Dixon data is key, as it can deliver crucial insights about energy usage and provide underpinnings of a massive disruption to today's standard distribution model.

If we succeed in adding renewables eliminating coal we will be able to reduce 84% of CO₂ emissions. Macon Cowles

At his turn, Reinhold Achatz pointed at "the last mile" as the best hope for significant reductions in energy consumption. In the end, cities must assume the responsibility for driving innovation and structural change to halt climate change, concluded Macon Cowles. Joost van Keulen echoed this sentiment and encouraged city governments to take actions that will change individual habits as well as city policy.

Plenary Session 2 **Smart Society**

IC Technologies for Social Development



18/11/2014 / 18:00-19:15

SPEAKERS

Jerome Engel / Adjunct Professor Emeritus - Berkeley Research Group - San Rafael USA Iemke Idsingh / Public Sector Solutions Director - Oracle - Utrecht Area - The Netherlands Rui Moreira / Mayor - City of Porto - Oporto - Portugal

Margaret Newman / Executive Director - The Municipal Art Society of New York - New York - USA
Sean O'Brien / Global Vice President - SAP Urban Matters & Public Security - SAP - Andiran - France
Claudio Orrego / Intendente Mayor - Santiago de Chile - Chile

CHAIR

Nick Leon / Head of Service Design - London Royal College of Art - London - UK

Cities must be an inclusive project for all their inhabitants. What are the means and methodologies that are being used to achieve this? Claudio Orrego emphasized that, without a strong commitment from leadership, the implementation of technological tools will not succeed. Rui Moreira asserted that leaders must be ready to adjust to new forms of representative democracy. lemke Idsingh echoed this sentiment and added that open data is key to make city development more inclusive.

It is a time for a new democracy, delegating back and empowering citizens. It claudio Orrego

At her turn, Margaret Newman focused on the effects of new technologies, and explained some NYC projects aimed at making more liveable neighborhoods. Sean O'Brien put the stress on the role of city leaders to make government services more effective. Finally Jerome Engel focused his remarks on the impact of innovation as a force for strengthening cities images and in turn creating new growth.





Plenary Session 3

Governance

The challenge of open governance and innovation



19/11/2014 / 10:15-11:30

SPEAKERS

Minerva Tantoco / Chief Technology Officer - New York City - USA

Anibal Gaviria / Mayor - City of Medellin - Medellin - Colombia

Rob Bernard / Chief Environmental and Cities Strategist - Microsoft Corporation - Seattle - USA **Mark Kleinman:** Director, Economic and Business Policy - Greater London Authority - London - UK

Charbel Aoun / President, Smart Cities Segment - Schneider Electric - London - UK

CHAIR

Stephen Goldsmith / Director, Innovations in American Government program and Data-Smart city solutions - Harvard Kennedy School of Government - Cambridge - USA

How are cities responding to the challenge of open governance and innovation? Minerva Tantoco described her approach as leading the process of creating a common and unifying vision of technology use for the city government. Marc Kleinman spoke about the importance for city governments to take the right approach to learning and including stakeholders in the innovation process.

Technology is easy, culture is hard. A lot of work has to be done to make open data. Citizens must also be open data providers.

Minerva Tantoco

Charbel Aoun coincided that open governance means providing more power to citizens, but this does not necessarily lead directly to innovation. Anibal Gaviria showcased several initiatives, such as 'Mi Medellin', to demonstrate it is possible. And Rob Bernard insisted that cities have to be the focus of our innovation efforts to serve citizens and solve sustainability problems at the necessary scale.

Plenary Session 4

Governance

Smart cities balancing economic, social and environmental development



19/11/2014 / 12:00-13:15

SPEAKERS

Venkaiaha Naidu / Union Minister for Urban Development - Government of India - New Delhi - India **Iñigo de la Serna** / Mayor, Spanish Smart Cities Network, Spanish Municipalities Federation - City of Santander - nder - Spain

Ibrahim Muhanna / Chairman - The Muhanna Foundation - Beirut - Lebanon

Eduardo Navarro de Carvalho / Chief Commercial Digital Officer - Telefónica - Madrid - Spain **Steve Leonard** / Executive Deputy Chairman - Infocomm Development Authority - Singapore

CHAIR

Jordi Puigneró / Director General of Telecommunications and Information Society - Government of Catalonia Barcelona - Spain

Running a city is a complex business. Municipalities try to keep up with new technologies, but how optimistic can we be about this investment in the medium and long term? Eduardo Navarro, from Telefonica, put the focus on the fact that no technology is meaningful if it doesn't help change the life of citizens. Ibrahim Muhanna noted that from the citizen side, there is today an open window for greater involvement, but sometimes there is also a lack of time or interest for this too. Iñigo de la Serna summarized that the biggest challenges for cities in the future are collaborative creation and predictive technologies, i.e., the possibility of giving response before problems occur. Steve Leonard concluded by stressing that a holistic approach is necessary to face the biggest challenges.

New economic landscape we see developing through technology is radically different from what we had until today. Inigo de la Serna





Plenary Session 5 **Technology**

Integrating data as an urban service



19/11/2014 / 18:00-19:15

SPEAKERS

Dan Hill / Executive Director, Futures and Best Practices - Future Cities Catapult - London - UK **Carlo Ratti** - Director, MIT Senseable City Lab and Founding Partner,

Carlo Ratti Associati / MIT Senseable City Lab and Carlo Ratti Associati - Turin - Italy

Jordi Alvinyà / Advisor - Abertis Telecom - Barcelona - Spain

Peter Guek Ser Hwee / Chief Information Officer - Urban Redevelopment Authority - Nil - Singapore **Amr Salem** / Managing Director, Smart Cities, Internet of Things - Cisco - Dubai - United Arab Emirates **José A. Rubio** / Analytics Manage - Indra sistemas - Madrid - Spain

CHAIR

Manel Sanromà / CIO - Barcelona City Council - Barcelona - Spain

How should data and 'smartness' be added to the existing realities of cities? Dan Hill emphasized that data and infrastructure are important but not the fundamental reason why we make cities. Infrastructure is just an enabler, he said. On the contrary, Jordi Alvinya stressed the importance of setting the right infrastructure and showcased the possibilities of an IoT network to manage the information generated daily across the city. Carlo Ratti clarified that data can be used to help cities handle infrastructure usage and Peter Quek Ser Hwee pointed at planning as a crucial area for the careful use of information.

We should talk a little bit less about infrastructure because citizens never really talk about it.

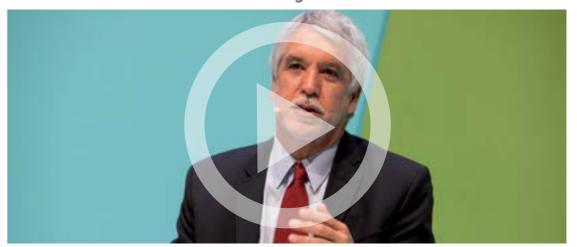
They ask: Is the bus there or not? On time or not? Is my rubbish collected?

Dan Hill

Amr Salem stated that cities must think about investing in infrastructures that serve multiple use cases. Finally, José A. Rubio showed that these questions must be approached from different angles that take into account innovation, wealth and the ROI of new systems.

Plenary Session 6 Mobility

Changing mindsets towards sustainable mobility



20/11/2014 / 9:30-10:45

SPEAKERS

Frank Horch / Senator for economy, transport and innovation - City of Hamburg - Hamburg - Germany.

Morten Kabell / Technical and Environmental Mayor - City of Copenhagen - Copenhagen - Denmark.

Enrique Peñalosa / Former Mayor - City of Bogota - Bogotá - Colombia.

Richard De Cani / Director - Transport Strategy & Planning - Transport for London - UK **Ryan Chin** / Managing Director & Research Scientist, City Science Initiative - MIT Media Lab - Cambridge - USA.

Luis Reis / Mobility Business and Innovation Manager - CEIIA - Maia - Portugal.

CHAIR

Alain Flausch /Secretary- General UITP - UITP Advancing Public Transport International Association - Brussels - Belgium.

How to organize urban mobility to achieve sustainability objectives? This was the point at issue of the session. Enrique Peñalosa emphasized that mobility is a political issue as well as a management issue and stressed the importance that cities grow in the right ways with the right designs. Richard de Cani and Frank Horch agreed it is necessary to encourage the use of public transit to deal with population growth. Furthermore, Luis Reis specified that it's not enough to simply adopt new technology: the design has to be user-centric.

If we are truly democratic a bus with 80 passengers is entitled to 80 times more space on the road than a car with only one. We need to design the city differently.

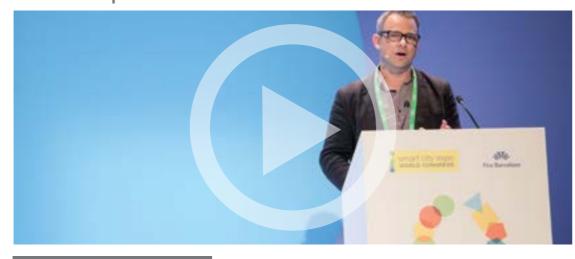
Enrique Peñalosa

Morten Kabell assured that Copenhageners have been the driving force in transforming city transit, and not the political officials. Ryan Chin noticed that shared mobility and peer-to-peer services have already disrupted our cities, and added that the next big disruption is self-driving, autonomous vehicles.



Plenary Session 7 **Sustainable City**

Planning challenges for resilient and equitable cities



20/11/2014 / 15:00-16:15

SPEAKERS

James Goodman / Director of Futures - Forum for the Future - London - UK

Cristina Tajani / Councillor for Labour Policies, Economic Development, University and Research Innovation and Smart Cities - Municipality of Milan - Italy

Sebastião Melo / Deputy Mayor - Porto Alegre City Hall - Porto Alegre - Brazil

Xavier Martín Garriga / Director of FCC Environment Barcelona and Balears - FCC - Barcelona - Spain

Bernard Archilla / Director Cities, territory and mobility - GDF Suez - Paris - France **Beatriz Simón** / Councilor for Innovation - Valencia City Council - Valencia - SpainCHAIR

CHAIR

Eugenie L Birch / Lawrence C. Nussdorf Professor of Urban Research and Education - Penn University - Philadelphia - USA

Climate change and world urban population growth are taking the challenge of planning cities to a new level. How can we prepare our cities to be resilient and equitable? James Goodman highlighted it is really essential that systems are developed that marry the formal systems and the informal systems within cities, so that they can be more inclusive and resilient. In this sense, Bernard Archilla backed the use of local and scalable solutions for basic services and put the stress on conserving the resources on hand. Sebastião Melo put the focus on technology and explained Porto Alegre has a control center that has 900 cameras surveying any potential risk.

Participatory platforms are absolutely fundamental to the way the city will work in the future and the way the city works now. James Goodman

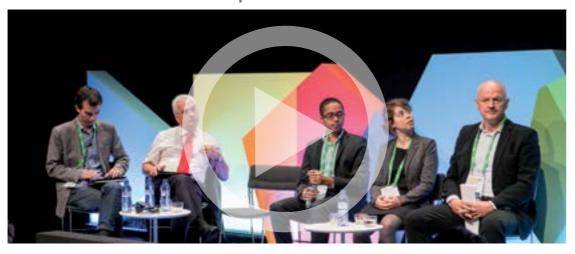
Xavier Martín Garriga highlighted the importance for companies to be more flexible and develop mitigation strategies to prevent, anticipate and adapt to hazards such as the ones stemming from climate change.







Civic engagement in urban development



18/11/2014 / 12:15-13:30

SPEAKERS

Usman Haque / Founding partner - Umbrellium - London - UK

Cristina Ampatzidou / Embedded researcher - University of Amsterdam - Rotterdam - The Netherlands

Peter Finnegan / Director Office of Economy & International Relations - Dublin City Council - Dublin - Ireland

Dan Getelman / Fellow - Code for America - San Francisco - USA

Flemming Borreskov / President - International Federation for Housing and Planning and Danish Architecture Center - Copenhagen - Denmark

MODERATOR

Manu Fernández / Founder - Human Scale City - Getxo - Spain

The participation of citizens in decision-making processes has become a key element in any debate about the future of our cities. Usman Haque spoke about civic uses of digital technology and noted that the Internet of Things (IoT) can help build new forms of distributed citizen participation. At her turn, Cristina Ampatzidou explained how to redesign government systems to accommodate social hacking, understood as a new attitude of cooperation, creativity and advocacy for the common good. Peter Finnegan explained how to integrate citizen participation in a city digital masterplan and Flemming Borreskow also underlined the need to build a real new political and urban planning framework to meet the requests of more demanding citizens. Finally, Dan Getelman offered this reading about how cities can rely on startups to adopt new services and solutions.

Smart Society

Urban labs building better cities



18/11/2014 / 15:00-16:15

SPEAKERS

Frank Kresin / Research Director - Waag Society - Amsterdam - The Netherlands

Gabriella Gómez-Mont / Chief Creativity Officer - Laboratorio para la Ciudad - Mexico DF - Mexico

Lanfranco Marasso / Living Lab Manager - PugliaSmartLab - Lecce - Italy

Giuseppe Marinelli de Marco / Deputy Director - ISIA ROMA DESIGN - Rome - Italy

Martina Toffolo / Urban Planning Consultant - Pordenone City Council - Pordenone - Italy

MODERATOR

Tomas Diez / FAB City, director - IAAC - Barcelona - Spain

Urban labs are spaces of experimentation that can help build better cities. The speakers described several projects that are reinventing the way governments and civil society collaborate. Frank Kresin presented the initiatives undertaken at the Waag Society focusing on open design, open data and biotech, among other subjects. Gabriella Gómez-Mont introduced the Laboratorio para la Ciudad, a government innovation lab in Mexico City focusing on civic innovation and urban creativity. Ianfranco Marasso explained that PugliaSmartLab embraces the open innovation model as a way of capitalizing on existing technologies and knowledge to create the best tools for service delivery. Ultimately, Martina Toffolo showed that while many proponents of smart cities focus on ICT as a silver bullet, effective solutions can be found through the onthe-ground work.





Habitat III: Engagement towards a new urban agenda



18/11/2014 / 15:00-16:15

SPEAKERS

Eduardo López Moreno / Director of Research - UN Habitat - Nairobi - Kenya

Eugenie L Birch / Lawrence C. Nussdorf Professor of Urban Research and Education - Penn University - Philadelphia - USA

Jorge Pérez Jaramillo / Planning Director - City of Medellín - Medellín - Colombia

Oleg V. Rybin / Chairman of Committee for urban development and architecture and Chief Architect - City of St. Petersburg - St. Petersburg - Russia

In 2016 the United Nations will hold the Third Conference on Housing and Sustainable Development, Habitat III, to reinvigorate the global commitment to sustainable urbanization and to focus on the implementation of a "New Urban Agenda." What should be the principles of this agenda? First of all, "let's get some smarter ways to look at what is happening with urban development around the world to make smarter decisions", said Eugenie Birch. But some situations require a quicker, responsive action. Jorge Jaramillo explained how Medellin developed the Plan de Ordenamiento Territorial, using innovation as a social tool and applying equity, inclusion and social responsibility as fundamental values. Eventually, Oleg Rybin explained that Russia is experiencing an overgrowth of big cities and revealed that Russian model of urban development is polycentric.

Smart Society

Citizens at the center of city planning



18/11/2014 / 16:15-17:30

SPEAKERS

Lluïsa Marsal-Llacuna / Director of the Official Master's Program in Smart Cities - University of Girona - Girona - Spain

Emanuela Donetti / inPACT Institute Director - Hepia, Haute Ecole Paysage, Ingenierie, Architecture - Geneva - Switzerland

Benjamin Dupont-Roy / Assistant de Recherche - Hepia, Haute Ecole Paysage, Ingenierie, Architecture - Geneva - Switzerland

José Manuel Corral / Intendente - Municipalidad de la Ciudad de Santa Fe de la Vera Cruz - Santa Fe - Argentina

Gloria Herance / Councilor, Public space, urban planning and sustainability - City of Hospitalet de Llobregat - Hospitalet de Llobregat - Spain

MODERATOR

Carlos Moreno / Professor - Scientific Committee of the High Council for Strategic Education and Research (CSFRS) - Paris - France

How can cities plan and develop not only with its citizens in mind, but with them engaged and participating? José Manuel Corral explained Santa Fe (Argentina) needed to rethink itself to become a more resilient city. So it started a project base on the UN-Habitat program "Building resilient cities", which put the stress on equity and inclusion. "A more equitable city is a more prepared city", he said. Gloria Herance Álvarez insisted on the fact that cities should be planned for citizens. So, technology has to be an enabler to get to the social smart city, she added. Lluïsa Marsal-Llacuna explained the research conducted by the University of Girona on human rights in the city. Emanuela Donetti and Benjamin Dupont-Roy lastly shared the work done on a project to develop urban planning using games as a methodology to gather information and elaborating 3D maps.





Fostering social development



19/11/2014 / 14:15-15:30

SPEAKERS

Barbara Möhlendick / Director SmartCity Cologne - Coordinator Climate Change - City of Cologne - Cologne - Germany

Hana Hertsman / Managing Director - Holon Municipality - Holon - Israel

Ray Pinto / Senior Government Affairs Manager for Europe, Middle East and Africa - Microsoft - Brussels - Belgium

MODERATOR

Francis Pisani / Independent journalist and writer - La Tribune & L'Opinion - Barcelona - Spain

People are the ultimate and most important part of cities. Can cities facilitate social development from the bottom-up? Barbara Möhlendick described SmartCity Cologne, which launched in 2011 with an important social dimension, focusing largely on neighbourhoods. Furthermore, Hana Hertsman described Holon's vision for its urban development, which has prioritized around children and culture. Eventually, Ray Pinto highlighted the issues of unemployment, especially among youth in Europe, and described Microsoft's YouthSpark initiative, which seeks to bridge this opportunity gap for 300 million young people around the world through varied programs focused on education, digital literacy and employability as well as entrepreneurship and innovation.

Smart Society

Innovation cities



19/11/2014 / 15:30-16:45

SPEAKERS

Charlotte Palmer / Environment Strategy and Future City Manager - Peterborough City Council - Peterborough - UK

Steve Bowyer / Director of the Future Cities programme 'Peterborough DNA' and Chief Executive - Opportunity Peterborough - Peterborough - UK

Muammar Khaled Al Katheeri / Executive Vice President Engineering Management - Dubai Silicon Oasis Authority - Dubai - United Arab Emirates

Guido Arnone / Technologies & Digital Innovation Director - Expo Milano 2015 - Milan - Italy

Rob Meikle / CIO - City of Toronto - Toronto - Canada Guido Arnone - Technologies & Digital Innovation Director - Expo Milano 2015 - Milan - Italy

Hila Oren / CEO - Tel Aviv Global - Tel Aviv - Israel

MODERATOR

Esteve Almirall Mezquita / Director of Center for Innovation in Cities - ESADE Business & Law School - Barcelona - Spain

Many cities around the glove are implementing new urban strategies driven by innovation. Steve Bowyer and Charlotte Palmer gave an overview of Peterborough DNA strategy, which strengthens on-the-ground city services through the use of technology. Muammar Khaled Al Katheeri described the Dubai Silicon Oasis Authority (DSOA), which was created to manage an economic free zone and technology incubator within the city. Guido Arnone noted the efforts being undertaken to use technology to facilitate the goals of the Expo Milano 2015. Rob Meikle explained that the City of Toronto is building a development strategy focused on quality of life. Finally, Hila Oren highlighted that the city of Tel Aviv is focusing on Talent, Technology, and Tolerance as three essential strategies to attract and expand the creative class.





Solutions for citizen engagement & participation



19/11/2014 / 15:30-16:30

SPEAKERS

Miquel Rey Castilla / Mataró City Council Counsellor to the Major on economic and innovation matters - Ajuntament de Granollers - Mataró - Spain

Vladislav Kreinin / CEO - Yopolis - Moscow - Russia

Adrian Latorre di Leo / Solution Manager - Altran - Barcelona - Spain

Stefano Persi / Director - ENIDE - Barcelona - Spain

Francesc Sabaté i Domènech / Head of Deploying Smart Factories Area - Fundació CIM - Barcelona - Spain

Paul Todd / Green Flag Award Manager - Keep Britain Tidy - Wigan - UK

Itziar Aspuru / Market Manager in Urban Area - TECNALIA Resesarch&Innovation - Derio - Spain

Tom Cole-Hunter / Postdoctoral researcher - CREAL - Barcelona - Spain

Joanna Hernaez / CUmapp - SODESTE - Madrid - Spain

Daniele Quercia / Research Scientist - Yahoo Labs - Barcelona - Spain

MODERATOR

Eduard Martin / Innovation Director - Barcelona City Council - Barcelona - Spain

Information and communications technologies (ICT) have become a very useful tool for fostering the engagement and participation of citizens in the processes of decision-making in cities. The session showcased a bunch of initiatives aimed at improving the relationship between citizens and governments with tools such as Telegram or Whatsapp; fostering creativity with platforms like Yopolis or FundacióCIM; evaluating the quality of existing and proposed public spaces, with standards like the Green Flag Award (UK) or Confort Urban Places (Spain) and tools to visualize environmental data like the one developed by CREAL; and gathering valuable information with mapping tools like CUmapp and computer science tools.

Smart Society

Participation and the role of green and open space in cities



19/11/2014 / 11:15-12:30

SPEAKERS

Jayne Engle / Curator - Cities for People - Montreal - Canada

Pranab Kishore Das / Principal Architect - PK Das & Associates - Mumbai - India

Eric Sanderson / Senior Conservation Ecologist - Wildlife Conservation Society - New York - USA

Ton Borsboom / Senior Director - Philips Design Lighting - Amsterdam - The Netherlands

MODERATOR

David Maddox / Founder/Editor-in-Chief - The Nature of Cities - New York - USA

The need for thoughtful creation of open spaces is crucial as today cities are growing at unprecedented and challenging speeds. While David Maddox introduced the city of the future in terms of the values it needs to reflect, Pranab Kishore Das explained how 'Open Mumbai' ensures citizens physical and democratic well-being. Jayne Engel described a collaborative initiative, named Cities for People, aimed at empowering change and help foster the multi-level transformation and ideological shift that is required to help cities embrace the needs of their populations. Ton Borsboom explained a project based on improving the dialogue between the security forces and the community to create safer public areas. Finally, Eric Sanderson showcased a simulation model to invite people to re-design the nature structure of Manhattan (NYC).





Tools and indicators for understanding cities



20/11/2014 / 12:30-13:45

SPEAKERS

Alexei Novikov / President - Habidatum International, Inc. (USA) - Moscow - Russia

Chye Kiang Goh / Senior Systems Analyst - Urban Redevelopment Authority of Singapore (URA) - Nil - Singapore

Masoud Ghandehari / Associate Professor - Center for Urban Science and Progress, NYU Polytechnic School of Engineering - New York - USA

Art Eggleton / Chair - World Council on City Data - Ottawa - Canada

Patricia McCarney / President & CEO - World Council on City Data - Toronto - Canada Boyd Cohen / Director of Innovation & Professor, Smart Cities - Universidad del Desarrollo - Santiago de Chile - Chile

MODERATOR

Ricart Joan Enric / Professor of Strategic Management - IESE Business School - Barcelona - Spain

How can we study and analyze cities to better understand their trends and plan ahead? Alexei Novikov explained the projects developed by Habidatum, which focus on time as a key metric. Chye Kiang Goh shared a 3D Digital Urban Model tool to facilitate urban planning processes. Masoud Ghandehari described the NYC Center for Urban Science and Progress (CUSP) and how data, research, and education are combined to serve city planning. Art Eggleton emphasized that data is crucial for cities to understand their progress towards their strategic development goals. Patricia McCarney described the potential of the first ISO standard for city development, ISO 37120, published in 2014. Finally, Boyd Cohen explained the Smart Cities Wheel, a framework used to encapsulate the key aspects of the smart cities model including a set of 28 indicators.

Technology

New developments on the internet of things



18/11/2014 / 12:15-13:30

SPEAKERS

Chaney Ho / President - Advantech Co. - Taipei - Taiwan

Jean-Louis Massaut / Director Solutions & IoT - Cisco Systems - Dubai - United Arab Emirates

Donald Clark / VP and Schneider Fellow - Schneider Electric - Amesbury Massachusetts - USA

Miguel Angel González Alemany / Chief Research Officer - Thyssenkrupp - Gijón - Spain

Carlos Yubero / Strategic Marketing Manager - Abertis Telecom - Madrid - Spain

MODERATOR

Svetlana Grant / GSMA - Director, Future IoT Networks - London - UK

The Internet of Things (IoT) market is evolving. What implications does this have for cities and service providers? Connecting devices across the city is just the first step. What makes networked connections more relevant and valuable is bringing together people, process, and data. Therefore, to make sense of all the information that will be captured, cities need analytics tools that turn data into solutions to improve citizens' life. These solutions might optimize traffic, boost transport efficiency, reduce CO2 output or improve public health. The limit is set by cities willingness and ability to collect and analyze quality data. Doing so, "our life becomes better because it gets smarter", agreed the speakers.

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Technology

Gathering and analyzing urban data



18/11/2014 / 15:00-16:15

SPEAKERS

 $\textbf{Karine Dognin-Sauze} \ / \ \text{Vice President for Innovation and New technologies - Grand Lyon - Lyon - France} \\$

Katya Serova / Vice-President - Habidatum International - New York - USA

Kevin Martin / Creative and Technical Services Manager - City of Portland Bureau of Planning & Sustainability - Portland - USA

David Trillo / CEO - Avansig - A Coruña - Spain

Ricardo Aguado / Indra sistemas - Head of the Architecture and Technology Consulting Competency Center - Madrid -Spain

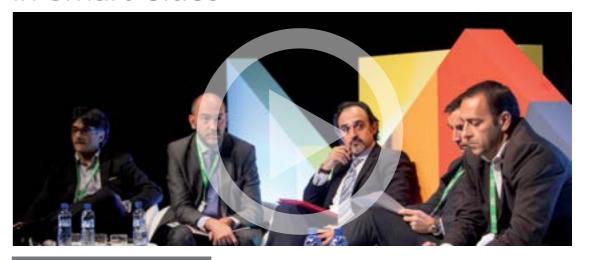
MODERATOR

Kevin Merritt / CEO - Socrata, Inc. - Seattle - USA

Data-driven analysis of mobility patterns, resource consumption, or the use of the Internet enables the development of better solutions to improve life in the city. New devices and the Internet of Things are valuable tools but the best way to sensor the city is still the engaged citizen, who can also provide useful spontaneous data through social networks. Then, this information has to be accurately analyzed and used to solve the problems outlined. Governments have to be responsive, flexible and dynamic and listen to the community to make smarter decisions to build the city of the future.

Technology

The Internet of Things in Smart Cities



18/11/2014 / 15:00-16:15

SPEAKERS

Francisco Jariego / Director of Industrial Internet of Things - Telefónica - Madrid - Spain

Guy Danon / Industry Director, Local & Regional Government - SAP Europe, Middle East & Africa - Paris - France

David Johera / Commercial Director - Wonderware - Barcelona - Spain

Julio Navío / Vice-dean and coordinator of the Public Policy and Regulation Group - COIT - Madrid - Spain

Victor Martínez / Commercial Director - NEC - Madrid - Spain

MODERATOR

Jose Antonio Teixeira Vitienes / Innovation General Manager - Santander City Council - Santander - Spain

The new developments on the Internet of Things and the capacity to collect and analyze information from sensors spread across the city is a key driver of smart cities but also a great challenge. How can these potential solutions help solve local problems? Guy Danon noted that the Internet of Things is not only about sensors, but about 'smartifying' data. David Jovera echoed this sentiment and underlined that connecting things to the Internet is not new, but he also acknowledged that the amount of connected things will change dramatically in the coming years. In the end, said Víctor Martínez, data is a treasure that should give us the necessary tools to build more efficient and transparent cities.





Big data management



18/11/2014 / 16:15-17:30

SPEAKERS

Vinay Venkatraman / CEO - Leapcraft - Copenhagen - Denmark
Torben Aagaard / Founder & Group CEO - Gobike - Copenhagen - Denmark
Vincent Hauseux / Marketing & strategy director, protection systems - Thales - Paris - France
See-Kiong Ng / Programme Director - Institute for Infocomm Research - Singapore - Singapore
Dante Ricci / Senior Director, SAP Global Public Sector - SAP - Oakton - USA
Gary Wachowicz / Industry Managing Director - Microsoft - Redmond - USA

MODERATOR

José M. Baldasano / Full Professor of Earth Sciences - BSC-CNS-Polytechnic University of Catalonia - Barcelona - Spain

The amount of information created on a daily basis reaches 2.5 quintillion. How should we deal with it to get the whole picture of what is happening? Speakers agreed that It is necessary to distinguish the information created by humans from the one delivered by machines to predict problems, foresee epidemics, minimize natural disasters, identify social issues, reduce pollution and frame a new relationship between governments and citizens. They also highlighted that we can only create a better future by acknowledging our past. Therefore, developing the right tools to gather and select this huge amount of data will be as important as figuring the means to interpret this information. That is the reason why cities should involve all possible intellectual agents in the process.

Technology

Solutions connecting urban & data



18/11/2014 / 16:15-17:30

SPEAKERS

Jen Hawes Hewitt / Director, Global Cities - Accenture - London - UK

Vicent Llorens / CTO / Electronic Engineer - UVAX Concepts S.L. - Paterna - Spain

Albert Martí / Managing Director - AMB Associates - Barcelona - Spain

Katharina Wagner / Head of Business Development - car2go Europe GmbH - Leinfelden-Echterdingen - Germany

Luigi Telesca / COO @ CREATE-NET, Founder & CEO @ eXrade - SUPERHUB - Povo - Italy

Maria Luisa Catalan / Research Line Manager - I2CAT - Barcelona - Spain

Simon Delaere / Senior Researcher / project leader - iMinds - Brussels - Belgium

Ignasi Fontanals / CEO - OptiCits - Barcelona - Spain

Rafael Gimenez / Senior Researcher - BDigital Technology Center - Barcelona - Spain

Kevin Coffey / Board Member - Newcastle Now representing VIMOC Technologies- Newcastle - Australia

Jordi Badal Segura / CEO & Founder - Parkimeter Technologies S.L. - Barcelona - Spain

MODERATOR

Josep Ignasi Bonet / Consultant - Government of Catalonia - L'Hospitalet del Llobregat - Spain

Through new electronic means citizens have more direct and easier access to services, while organizations and institutions have more facilities for managing them. The session reviewed successful implementations and solutions connecting information with urban life, such as an intelligent remote control system to use streetlights as WiFi hotspots and cameras and varied platforms to connect transportation entities, provide open mobility data, better understand motivations and means of transportations to solve traffic problems or boost green mobility. Speakers also enhanced the need to develop interdependencies between urban services and stimulate sustainability and resilience strategies.







City to city collaboration: sharing knowledge, code and standards



19/11/2014 / 14:15-15:30

SPEAKERS

Dave Carter / Honorary Research Fellow - Chair, European Connected Smart Cities Network - Centre for Urban Policy Studies (CUPS) at the University of Manchester - Manchester - UK **Jaakko Salavuo** / Head of Comms & IT - City of Helsinki - Helsinki - Finland

Ger Baron / Chief Technology Officer - City of Amsterdam - Amsterdam - The Netherlands **Bart Rosseau** / E-Strategy and Eurocities Open Data Working Group - co-chair - City of Ghent - Ghent - Belgium

Tim Wisniewski / Director of civic technology - City of Philadelphia - Philadelphia - USA

MODERATOR

Hanna Niemi-Hugaerts / Development Manager - Forum Virium Helsinki - Helsinki - Finland

Pioneer cities are joining forces on data and API harmonization to enable scaling of smart city services. The session reviewed some collaborative initiatives based on Open Data which improve citizens' life. Ger Baron explained the city discovered thanks to an app that they were putting efforts to remove snow in the wrong places. Tim Wisniewski emphasized the role of citizens' collaboration to mapping delinquency in Philadelphia and then contributing to a decrease in the crime rate. The panel also noted that public institutions are increasingly replicating Open Data projects, which have been successful in other countries, in order to offer better services.

Technology

Integrating ICT with urban services infrastructures



19/11/2014 / 15:30-16:45

SPEAKERS

Carlos Domingo / Senior Executive Officer for Data and Business Intelligence and Alliances and Partnerships - Mobily -Madrid - Spain

Jessica Lappin / President of the Alliance for Downtown New York - Downtown Alliance - New York - USA

Kamal Diab / Managing Director - Precast/Logitek - Dubai - United Arab Emirates

Mirko Masi / Manager Mobile Communications - Abertis Telecom - Barcelona - Spain

Carles Rossinyol / Deputy chairman of the Department of Finance Office, Internal resources and New Technologies - Diputació de Barcelona - Barcelona - Spain

Francisco Bernardo / Product Development and Innovation Manager - Wellness Smart Cities and Solutions - Seville - Spain

Carlos Domingo - Senior Executive Officer for Data and Business Intelligence and Alliances and Partnerships - Mobily - Madrid - Spain

MODERATOR

Miguel Raimilla / CEO & Executive Director - Telecentre Foundation - San Francisco - USA

ICT are changing the way cities manage basic services. Collecting real time data is key to optimize processes and make the city more efficient. Jessica Lappin stated that citizens want to "go from Wall Street to Wired Street" and be involved in any change, from the tallest building to the lowest street. Mirko Masi stressed the need for a better coordination between all the stakeholders to have "better connectivity with less infrastructure". Carlos Rossinyol insisted on the fact that a smart city must expand and produce a smart region. Francisco Bernardo reiterated that technology does not make a city smart and that tools have to be used with a goal. In that sense, Carlos Domingo considered that the key driver of the future smart city is sustainability.







City Protocol: sensing & seeing a city's anatomy



19/11/2014 / 15:30-16:45

SPEAKERS

Michael Jansen / CEO - Cityzenith - Chicago - USA

Albert Isern / CEO - Bismart - Barcelona - Spain

Dave Welsh / Corporate Standards, CityNext - Microsoft - Seattle - USA

Darren Ware / Smart Cities Latin America - Cisco - Miami - USA

Jordi Cirera / Project Manager - Institut Municipal d'Informàtica - Ajuntament de Barcelona. - Barcelona - Spain

MODERATOR

Frans-Anton Vermast / Senior Strategy Advisor for Low Carbon and Connected Urban Planning - Amsterdam Smart City Amsterdam - The Netherlands

City Protocol seeks to create the Internet of Cities through the development of an interoperable platform, which supports shared practice and heightened performance for cities. Frans-Anton Vermast explained the purpose of this initiative in Barcelona. Michael Jansen put forth a striking statistic: 99% of data in unstructured. In this context, standards play a crucial role in helping assess performance and measure progress. In the same vein, Albert Isern presented a solution to help businesses collect data in a more intelligent way. Dave Welsh gave more details on the technological anatomy of a city, which is composed of three layers: structure, culture and society. Darren Ware talked about City Diagnostics. Finally, Jordi Cirera introduced CityOS, an open sensor platform developed in Barcelona, which is being adopted by other cities.

Technology

Developing ICT-based city initiatives



20/11/2014 / 11:15-12:30

SPEAKERS

Rega Kakabas / Strategic developer for public sector - City of Stockholm's City Planning Administration - Stockholm - Sweden

Paul Doherty / President - The digit group, inc. - Collierville - USA

Maurizio Cecchi / Resp. R&D Project Financing - Telecom Italia - Rome - Italy

Vincenzo Maltese / Smart Society FET IP EU project Leader - University of Trento - Trento - Italy **lemke Idsingh** / Public Sector Solutions Director - Oracle - Utrech Area - The Netherlands

MODERATOR

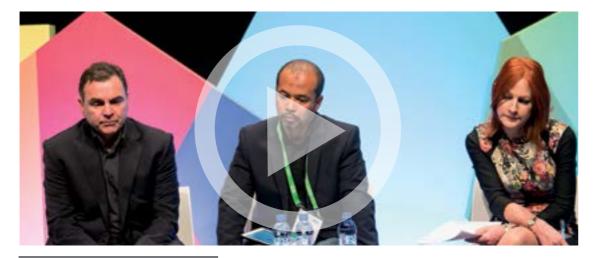
David Marí / Innovation Consultant - BDigital Technology Centre - Barcelona - Spain

Planning cities and districts with a strong ICT foundation has been a significant global trend with many different names. The panel agreed that the software and hardware that supports a smart city should be based on open standards to do more with less. Rega Kakabas explained that Stockholm has developed an app to help elderly choose the medical needs to be covered by public health. This initiative has improved efficiency and reduced costs. The speakers agreed that a smart city needs transparency but public administrations have also to ensure that private data is still private. While the open data movement has visible support from all levels of government, Open data policies and practices are a work in progress.





Technologies for resilient cities



20/11/2014 / 12:30-13:45

SPEAKERS

Faris Yahaya / Managing Director - Cyberview Sdn Bhd - Cyberjaya - Malaysia

Giampiero Nanni / Government and Public Affairs, EMEA - Symantec - Reading - UK

Sébastien Sabatier / Product Line Manager Citizen Security & Border Surveillance - Thales

Toshimasa Ikura / Senior Manager - Nippon Telegraph and Telephone West Corporation - Osaka -

Mitsuhiro Kirihara / Senior Executive Councilor, Assistant to Chief Information Officer - Planning and Development Bureau - Kumamoto city - Japan

Guillaume Delmas / Director Smart Solutions Cofely INEO - GDF Suez - Paris - France

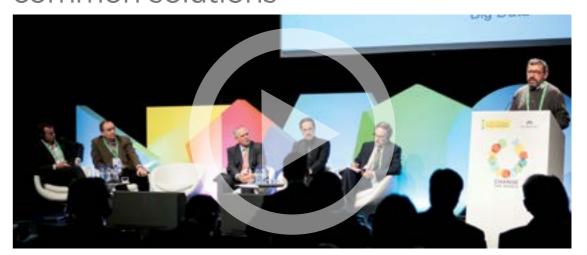
MODERATOR

Mary Keeling / Manager, Economic Analysis - IBM Smarter Cities - Dublin - Ireland

ICT are allowing cities to better foresee, mitigate and adapt to disruptive events with infrastructure and through social skills development. Faris Yahaya gave an overview of how Cyberjava City Center is making changes to make a more resilient city for citizens. Giampiero Nanno gave an informative insight into the growing challenges and threats in the area of cybersecurity. In addition, the critical role of leadership was highlighted as part of the effective response of organisations. At his turn, Sébastien Sabatier showed the example of how Mexico City made significant progress in improving public safety by taking a more coordinated, multi agency approach. Finally, Toshimasa Ikura showed the efforts to make Kumamoto a smart town, and in particular, to help improve citizen's awareness of disaster prevention.

Governance

Growing the Cities Market by enabling common solutions



18/11/2014 / 12:15-13:30

SPEAKERS

Eduardo López Moreno / Director of Research - UN Habitat - Nairobi - Kenya

Dan Byles / Member of Parliament - UK Government - London - UK

Carlos Gadsden / Executive Secretary - International Foundation for the Development of Reliable Governments - México - Mexico

Marius Boada / Statistics and opinion studies director - Barcelona City Council - Barcelona - Spain Juan José Hierro / Chief architect - Fiware - Madrid - Spain

MODERATOR

Graham Colclough / Chair of ISO Strategic Advisory Gr on Smart Cities - UrbanDNA - London - UK

Creating tools and open standards should facilitate a more effective, connected and transparent marketplace for innovative city solutions, thereby accelerating the uptake of high-impact proven innovations. Eduardo López Manzano presented the City Prosperity initiative which stems from the need to measure the performance of cities and the outcome of public policies. Without indicators it is not possible to measure whether cities are becoming smart, he said. Carlos Gadsden talked about the first ISOS's effort in governments (ISO 18091:2014). Marius Boada underlined that "having data is easy, what it matters is having a direction". Juan José Hierro explained the Fiware initiative to provide open data standards. Finally, Dan Byles summarized that Smart City is not about technology, but rather it is a mindset.







Improving city management for better service provision



18/11/2014 / 12:15-13:30

SPEAKERS

Valto Loikkanen / Founder & Senior Partner - Grow VC Group - Helsinki - Finland

Sylvie Spalmacin / Roma - Vice President, Smarter Cities, Europe - IBM - Paris - France

Mercè Rius Serra / Deputy president for environment - Diputació de Barcelona - Barcelona - Spain

Zhenguo Dong / Director - Website management center of Hebei people's government
Shijiazhuang City - China

Peter Still / Executive Director - Oracle - Reston (Virginia) - USA

MODERATOR

María Serrano Basterra / Smart City Center of Excellence Director - Schneider Electric - Madrid - Spain

Smart cities aim for a better and more efficient service provision. What are the main strategies to keep a balance between social, environmental and economic sustainability? Valto Loikkanen focused on how to generate more innovation and bet for an open and collaborative startup ecosystem to get successful results. In this sense, Peter Still underlined three issues that affect citizens when they want to set up a business: complexity, compliance and cost. Sylvie Spalmacin insisted that "business value comes from the intersection of the physical and the digital layers" and Mercè Rius Serra recognized that there is a high potential to introduce smart solutions in cities, since they are not really expensive and can be gradually integrated. Eventually, Zhenguo tackled the major difficulties for e-Government development, such as institutional obstacles and the need for further security.

Governance

Partnerships for urban development



18/11/2014 / 15:00-16:15

SPEAKERS

Ellis J. Juan / General O Mayor, Sabadell City Council - Sabadell City Council - Sabadell - Spain Josep Ayuso Raya / 1st Deputy Mayor, Sabadell City Council - Sabadell City Council - Sabadell - Spain

Jorge Macri / Mayor - Vicente Lopez City - Vicente Lopez - Argentina Jingmin Huang / Senior Urban Development Specialist - Asian Development Bank - Manila -Philippines

MODERATOR

Pedro Julio Uribe-Bermudez / Senior.Manager - WW Public Sector - Microsoft - Parkland - USA

A city's development of both its infrastructure and organizational capacity is built on long-term relationships between all interacting urban stakeholders. What kind of alliances are fostered to develop a city's complex needs? Jingmin Huang acknowledged that different partnerships need to be created to build the smart city sectors together. Ellis J. Juan insisted that "cities that do not offer quality of life won't be competitive, and thus won't attract investment nor generate inclusive job-rich growth". Finally, Jorge Macri and Josep Ayuso Raya, from Sabadell, explained an interesting experience of partnership established between the Catalan city and Vicente Lopez (Argentina) to reduce the time people spend travelling between home and work. Learn from the mistakes to take shortcuts.





External networks to foster innovation within cities



18/11/2014 / 16:15-17:30

SPEAKERS

Andrea Edmunds / Head of Innovation - Future Cities Catapult - London - UK

Arturo Muente-Kunigami / Senior ICT Policy Specialist - The World Bank - Washington - USA

Nikolaos Isaris / Deputy Head of Unit: Net Futures, Experimental Platforms - European Commission - Brussels - Belgium

Jarmo Eskelinen / CEO - Forum Virium Helsinki - Helsinki - Finland

MODERATOR

 $\textbf{Katalin Gallyas} \ / \ \text{Open Innovation Policy Advisor - City of Amsterdam - Amsterdam - The Netherlands}$

City external networks can facilitate real-time experimentation with emerging technologies that otherwise would be difficult to support through local city governance. How to leverage these networks? According to Nikos Isaris first of all, we need to think mainly about three types of them: access to funds, other cities, and developers and platforms. Then Arturo Muente-Kunigama added some principles of ICT for development, such as building for sustainability and using open standards and open innovation. Andrea Edmunds complemented this view with three innovation principles that cities can take from the world of design: creating city innovation teams, designing for and with people and making data work for the city. Finally, Jarmo Eskelinen focused on city to city interoperability and said cities can use openness as a tool to manage interoperability.

Governance

Relaunching economically our cities



19/11/2014 / 14:15-15:30

SPEAKERS

Xu Liu / Vice Director - Beijing Municipal Commission of Economy and Information Technology - Beijing - China

Carlos Negreira Souto / Mayor - Ayuntamiento de A Coruña - A Coruña - Spain

Jorge Muñoz Wells / Mayor - Municipalidad de Miraflores - Lima - Peru

Guy Barlow / Director of Industry Strategy & Responsible for Public Administration Strategy - Oracle - Scottsdale - USA

Harry Verhaar / Global Head of Public & Government Affairs - Philips Lighting - Riethoven - The Netherlands

MODERATOR

Giorgio Prister / President - Major Cities of Europe - Bremen - Germany

As greater competition between urban areas for talent and resources puts an added emphasis on job creation and enhancing quality of life, it is important to examine those urban or regional strategies that focus on economic development. Xu Liu, from Beijing, presented the Smart City experience about ICT development and the promotion of the construction process to support the Beijing Municipal Economic and Social development. Jorge Muñoz Wells talked about a strategy to attract tourists and companies by implementing a comprehensive plan of security and safety. Carlos Negreira Souto insisted on the need for citizens to participate in smart city decisions.

As for private companies, Oracle introduced its ICT platform and Philips Lighting demonstrated that cities can dramatically reduce the electricity bill by adopting modern lightning technologies.





Open data initiatives



19/11/2014 / 17:30-16:45

SPEAKERS

Jarmo Eskelinen / CEO - Forum Virium Helsinki - Helsinki - Finland

Jennifer Belissent / Principal Analyst - Forrester Research - Les Houches - France

Rob Kitchin / Professor - National University of Ireland Maynooth - Maynooth - Ireland

Gavin McArdle / Developer & Postdoctoral Researcher - National Centre for Geocomputation,
National University of Ireland Maynooth - Maynooth - Ireland

Gustavo Bevilacqua / Mayor - Bahía Blanca Government - Bahía Blanca - Argentina

Tom Heath / Head of Research - Open data Institute - London - UK

MODERATOR

Gemma Galdón / Research Director - Eticas Research and Consulting - Barcelona - Spain

What are the benefits, opportunities and challenges associated with opening data? First of all, Jarmo Eskekinen stated that cities should be an enabler for innovation and reminded that it is important to reflect on how we are managing our digital self when we operate in the smart city context. Jennifer Belissent argued that the interest in open data comes from a previous push for more transparency. Rob Kitchin and Gavin McArdle explained how software and data are reshaping cities, and what are the social, political and economic consequences of creating smart cites. Gustavo Bevilacqua presented the case study of the first governmental agency for open government and innovation, which was created with the involvement of the main stakeholders of Bahía Blanca (Argentina). Finally, Tom Health addressed new questions: how do we scale participation? How do we create an infrastructure that goes beyond the installation of a smart city platform?

Governance

Innovative public procurement and public-private collaborations



19/11/2014 / 15:30-16:45

SPEAKERS

Lean Doody / Associate Director of Consulting - Arup - London - UK - Partner
Edna Pasher / Founder & CEO - EPA Management Consultants - Tel Aviv - Israel
Jorge Mario Díaz / Vicepresidente de Gobernanza - Camara de Comercio Bogotá - Bogotá - Colombia

Alberto Sanfeliu / Full Professor - ECHORD++ PCP in Urban Robotics - UPC - Barcelona - Spain Peter Bjørn Larsen / Smart City Business Develpment Manager - CLEAN - Copenhagen - Denmark Rafael Pérez Feito / Director of Central Europe - FCC Aqualia - Madrid - Spain

MODERATOR

Lluís Cases / Partner, leader Garrigues Smart City Group - Garrigues - Barcelona - Spain

The essential concept of innovative public procurement and public private collaboration is the "most value offer", stated Lluis Cases to start the session. Lean Doody echoed this sentiment and underlined the seven principles for the smart city: clarify the opportunity; take ownership; engage; prepare; act; check and reflect; repeat and share learning. Edna Pasher kept it simple: "whatever the problem, community is the answer". Jorge Mario Díaz Luengas noted that in any PPP venture, it is important to identify which are the best stakeholders to work with. Peter Bjørn Larsen made clear that some of the benefits of PPP frameworks for startups consist of teaming up with big companies or cities. Rafael Pérez Feito said that in PPP schemes it is worth taking into account a reasonable risk allocation between both parties (public and private), and the financial feasibility of the project.







Smart Catalonia, the smart strategy of Catalonia



19/11/2014 / 16:30-18:00

SPEAKERS

Felip Puig / Minister of Enterprise and Labour - Government of Catalonia - Barcelona - Spain Mario Campolargo / Director Net Future - European Commission's DG Connect - Brussels - Belgium Jordi Puigneró / Director General of Telecommunications and Information Society - Government of Catalonia Barcelona - Spain

The Government of Catalonia is developing the SmartCAT strategy, aimed at expanding the concept of Smart City at the Catalan level so as to transform Catalonia into an international benchmark Smart Region. The strategy focuses on five action areas: smart city, smart land, smart economy, smart government and smart citizen. Jordi Puigneró placed the development of this strategy within the context of an on-going digital revolution characterized by being fast and cross-sectorial in nature. Mario Campolargo agreed that Catalonia is investing in its strengths. Finally, Felip Puig insisted that the SmartCat strategy attempts to integrate the local initiatives into an integral and holistic vision, so as to avoid duplication of efforts and create synergies to boost Catalonia's position as a referent for smart city regions.

Governance

Innovative urban development strategies



20/11/2014 / 11:15-12:30

SPEAKERS

Juan Karlos Izagirre / Mayor - City of Donostia - Donostia - Spain

Srinivas Chary Vedala / Administrative Staff College - Dean - Hyderabad - India

Gaëtan Siew / CEO - Global Creative Leadership Initiative - Port Louis - Mauritius

Ali Asghar Ghaemi / Director of new technologies department - City of Tehran - Tehran - Iran

Juan José Cué / Secretary of Digital Innovation and Communications - Municipality of Puebla - Puebla - Mexico

MODERATOR

Montserrat Pareja Eastaway / Associate Professor and leader of the Research Group 'Creativity, Innovation and Urban Transformation' - University of Barcelona - Barcelona - Spain

By generating the right conditions for creativity, innovation and collaboration, cities can foster social development. How can governance enhance and encourage innovative development in cities? The speakers agreed that, first of all, local governments need to define priorities and act according to them, in the short and long run and keeping in mind sustainability. Moreover, they said problems in cities should be addressed in a holistic multidimensional manner, as culture –taken in a broad sense- and technology go hand in glove and cannot be separated. Finally, they underlined that all the smart city stakeholders have to participate in the decision making process. Trust and truth should be a leitmotif for policy-making, they concluded.



SMART CITY EXPO WORLD CONGRESS

Governance

Public private partnerships for smart cities



20/11/2014 / 12:30-13:45

SPEAKERS

Yatinder Mahajan / Smart City Director - Dubai Design District - Dubai - United Arab Emirates **Christian Herzog** / Head of Division Digital Business & Service Industries - Berlin Partner for Business and Technology -Berlin - Germany

Félix Martin Gordo / Deputy Director for Sector Information Systems, Autonomous Information Technologies Body - City of Madrid - Madrid - Spain

Jesse Berst / Chairman - Smart Cities Council - Redmond - USA

Luis Fernando Ulloa / Gerente de Sostenibilidad - Financiera del Desarrollo Territorial - FINDETER - Bogotá - Colombia

Jorge Eduardo Rojas Giraldo / Mayor - Municipality of Manizales - Manizales - Colombia

MODERATOR

Esteve Almirall Mezquita / Director of Center for Innovation in Cities -

ESADE Business & Law School - Barcelona - Spain

Innovative smart cities are pursuing imaginative and collaborative partnerships with the private sector. Are these frameworks helping to achieve more with less? The panel thought so. Jesse Berst introduced the online largest pool of resources on smart city case studies. Yatinder Mahajan followed through with the presentation of a public private partnership (PPP) case study focused on Dubai. Christian Herzog acknowledged that PPP projects have had a positive impact in the development of the smart city in Berlin. He also pointed at startups as innovation enablers. Luis Fernando Ulloa showcased two more PPP projects aimed at fostering Colombian competitiveness and partly inspired in 22@ Barcelona. Felix Martin focused on how to turn data into strategic information. Finally, Jorge Eduardo Rojas got back to basics: the first step towards the smart city is creating a digital ecosystem.

Governance

Solutions for better governance



20/11/2014 / 11:15-12:30

SPEAKERS

Josep M Mompín Valeri /Jefe de Paisaje Urbano y Medio Ambiente - Ayuntamiento de Mollet del Vallès - Mollet del Vallès - Spain

Martín Fernández Prado / Teniente de Alcalde de Infraestructuras - Ayunt. de A Coruña - A Coruña - Spain

Ramón Ferri / Jefe del servicio TIC del Ayunt.de Valencia - Ayuntamiento de Valencia - Valencia - Spain Daniel Ortiz Espejo / Alcalde - Ayuntamiento de Mostoles - Mostoles - Spain

Andrea Almi / CTO / Capability - ICT & Networking line of business - Selex ES - Genova - Italy

Claudio Mingrino / VP - Executive Director EMEA - Hexagon Geospatial

Álvaro Oliveira / CEO - Alfamicro - Cascais - Portugal

Lorenzo Sabatelli / Director - GLOBMOD - Castelldefels - Spain

Itziar Aspuru / Market Manager in Urban Area - TECNALIA Resesarch&Innovation - Derio - Spain Jorge Leon / Project Manager - ITENE - Packaging, Transport and Logistics Research Center -

Valencia - Spain **Catarina Selada** / Head of Cities Unit - INTELI - Inteligência em Inovação, C. de Inovação - Lisboa -

Antoni Gutiérrez-Rubí / Founder & CEO - Ideograma - Barcelona - Spain

Irene Gómez Martin / Concejal de Innovación - Ayuntamiento de Mostoles - Mostoles - Spain

MODERATOR

Mila Gascó / Deputy Director - Center for Innovation in Cities - ESADE - Barcelona - Spain

How can governments work better and bring improvements to living conditions in cities? The panel showcased varied solutions to help turn the smart city concept into a reality. Some focused on specific tools, like an IT platform to manage green spaces (Mollet del Vallès), a solution to monitor and assess the performance of electric fleets (Madrid) or different apps4citizens (Ideograma). Others put the stress on strategy (A Coruña, Valencia, Móstoles), but all together agreed that the actors of the real transformation are the citizens. In this sense, Álvaro Oliveira advocated that smart cities have to turn into 'smart human cities'. Mila Gascó concluded that the big change will occur when governments do not build cities for the stakeholders, but with them.



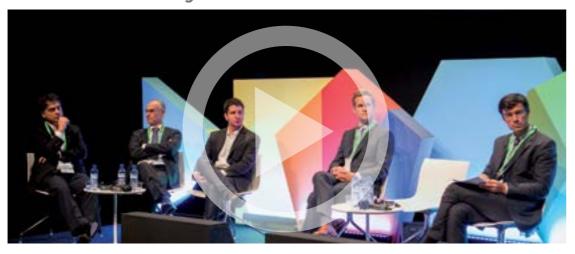






Energy

Rethinking cities to improve energy sustainability



18/11/2014 / 12:15-13:30

SPEAKERS

Giovanni Vicentini / Town and energy planner - Province of Torino - Energy area - Torino - Italy
Jonathan Brookes / Smart City Project Manager - Bristol City Council - Bristol - UK
John Dulac / Energy Analyst from Energy Demand Technology Unit - IEA - Paris - France
Massimo Bertoncini / Director of European R&D Projects - Engineering Ingegnerialnformatica Roma - Italy

Leandro Madrazo / Professor - ARC Engineering and Architecture La Salle - Barcelona - Spain

MODERATOR

Manel Sanmartí / Manager of the Electrical Engineering Area - Catalonia Institute for Energy Research - Sant Adrià del Besòs - Spain

If we are to reduce emissions coming from heating, cooling and the power necessary to run our homes, we will need to rethink buildings and cities, and the way we are producing, storing and distributing urban energy. Giovanni Vicentini and Jonathan Brookes agreed intelligent systems and open data collaboration are key to understanding and changing the way cities consume energy. John Dulac added cities have to do a better job sharing best practices and lessons learned from the other cities as well as improving the existing systems. Massimo Bertoncini underlined the importance of storage systems, which are the missing link of renewable energy. Eventually, Leandro Madrazi noted the usefulness of semantic technologies to assess energy planning worldwide.

Energy

Large scale integration of renewable energies and energy efficiency in cities



18/11/2014 / 16:15-17:30

SPEAKERS

Annemie Wyckmans / Associate Professor - Norwegian University of Science and Technology - Trondheim - Norway

 $\textbf{Bernd Vogl}\,/\,\text{Head}$ of Energy Planning - Vienna City Administration, Department for Energy Planning - Vienna - Austria

Hans-Martin Neumann / Research Engineer - AIT Austrian Institute of Technology - Vienna - Austria **Kieran Delaney** / Research Development Manager and Principal Investigator - Nimbus Centre, Cork Institute of Technology - Cork - Ireland

MODERATOR

Pablo Dolado / Researcher - Aragon Institute of Engineering Research, I3a University of Zaragoza - Zaragoza - Spain

Today's energy-related research questions are highly complex and can only be solved by taking an interdisciplinary, transnational approach. Annemie Wyckmans made clear the need for making low-carbon living much easier to engage citizens and transform the city environment. Bernd Vogl explained that subsidization of building renovation in Vienna has enabled 20% reduction of CO₂ emissions. Kieran Delaney put forward the key role of the Internet of Things (IoT) to fuel the energy revolution in cities. Finally, Hans-Martin Neumann said the most important challenges for cities can be summarized in one word: integration. Cities need integration of technologies, data and processes and a new way to do research. Small changes in cities mean strong changes in global energy consumption and emissions.





Energy

Smart energy for our cities



19/11/2014 / 14:15-15:30

SPEAKERS

Kia Andreasson / Deputy Mayor - Responsible for Environment, Climate, Public Healh and Consumer Issues - City of Gothenburg - Gothenburg - Sweden

Shoji Takenaka / VP, Chief Fellow - Toshiba - Yokohama - Japan

Norihiko Nomura / Executive Director for Climate Change Policy Headquarters - City of Yokohama - Vokohama - Japan

Macon Cowles / City Council Member - Boulder City Council - Boulder - USA

Margaret Groff / Chief Financial Officer (CFO) - ITAIPU Binacional - Foz do Iguaçu - Brazil

Alistair Pim / VP Smart Cities Business Development & Alliances - Schneider Electric - Andover - USA

MODERATOR

Eddie Bet Hazavdi / Director of department of Energy conservation and smart cities. - Ministry of Infrastructures Energy and Water - Jerusalem - Israel

In 2050, how will we acquire the energy power necessary to run our cities? Strategies already being implemented look to the efficient use of renewables, new technologies for storing and distributing energy, massive use of data, reducing energy needs and increasing energy efficiency. Kia Andreasson highlighted the role of public administration to promote energy projects. Macon Cowles spoke about Boulder's actions to improve energy management, which includes buying the electric distribution system from the existing electric utility. Norihiko Nomura stressed the need to promote public private partnerships to build future cities. Finally, Shiji Takenaka was in favor of a more holistic understanding of the problem.

Energy

Reinventing the energy market



20/11/2014 / 11:15-12:30

SPEAKERS

Jean-Marie Bemtgen / Policy Officer - European Commission Energy Directorate - Brussels - Belgium

Isabel Pinto Seppä / Research Team leader - VTT - Espoo - Finland

Jeroen Westendorp / Economic Policy Advisor Energy & ICT - Groningen Municipal Council - Groningen - The Netherlands

Paula Kirk / Associate director of Group Leader, Cities, Energy and Climate Change Consulting - Arup - London - UK

Tim Pryce / Head of Public Sector - The Carbon Trust - London - UK

MODERATOR

Arnau Queralt / Director at Advisory Council for Sustainable Development - Government of Catalonia - Barcelona - Spain

The transition to a new energy scenario will entail not only the development of technologies but also their commercial availability and deployment. Jean Marie Bemtgen strongly emphasized that new energy technologies or services will succeed only if they have a strong business case to support them. Isabel Pinto Seppa put forward that the energy market has to be changed by enabling energy management technologies. Jeroen Westendorp stressed the importance of giving the power back to the people to make smart energy decisions. Paula Kirk presented the mayor of London's plan to get 25% of London's district heating energy to be supplied by decentralized sources. Finally, Tim Pryce presented main guidelines for governments to change how cities consume energy. The strongly needed change in the energy market will be achieved only if there is a joint effort by both private and public sectors.





Energy

Electrifying urban mobility



20/11/2014 / 12:30-13:45

SPEAKERS

Ramón Pruneda / Head of Energy and Mobility Projects in Strategic Sectors Departmen - Barcelona City Concil - Barcelona - Spain

David Beeton / Director - Urban Foresight Limited - Newcastle upon Tyne - UK

Heike Barlag / Project Manager - Siemens AG - Nuremberg - Germany

Laurent de Vroey / Project Manager - GDF SUEZ - Laborelec - Brussels - Linkebeek

MODERATOR

Arturo Pérez de Lucia / Director Gerente / Managing Director - AEDIVE - Madrid - Spain

The development of electric vehicles needs to overcome an established culture of petrol-fueled vehicles. Where do we stand and what are the major challenges to come? Ramon Pruneda spoke about the measures implemented in Barcelona to develop the electric vehicle (EV), based on fiscal incentives, HOV access for EV, cheaper tolls or cheaper parking. David Beeton underlined that EV has been proven suitable for cities, but we still have to work on its commercial deployment and give people more information. Heike Barlag focused on charging infrastructure, which is the first step in encouraging mass adoption of EVs. But what does that mean for the grid? In this sense, Laurent de Vroey predicted that cars will be able to work as a battery, and be used by a house or grid.

Mobility

Integrating all means of urban transportation



18/11/2014 / 12:15-13:30

SPEAKERS

Abdulla Al Madani / CEO, Corporate Technical Support Services (CTSS) - Roads & Transport Authority (RTA) - Dubai - United Arab Emirates

John Nelson / Transport Studies Chair - University of Aberdeen - Aberdeen - UK

Adrià Gomila / Mobility Director - Barcelona City Council - Barcelona - Spain

 $\textbf{Eric-Mark Huitema} \ / \ Global \ Manager, \ WW \ Smarter \ Transport. \ Leader - IBM - Amsterdam - The \ Netherlands$

Mark Rocky / Business Development Director - Indra Sistemas - Barcelona - Spain

MODERATOR

Jerome Pourbaix / Head of Policy & Outreach -UITP - Brussels - Belgium

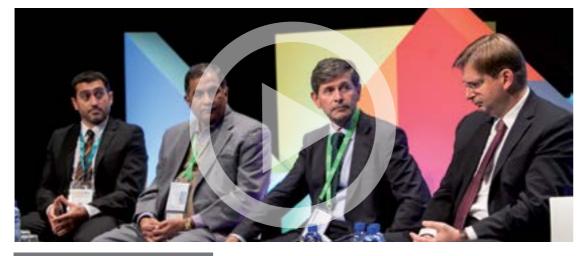
There is no one-size-fits-all solution for city transit. What are the most effective cities doing in this regard? Abdulla Al Madani shared the details of Dubai Mobility strategy, which aims at having safe and smooth transport. That is the reason why they are developing almost 200 measures to transform services. John Nelson, from Aberdeen, explained how we can crowdsource information and use data to better plan door to door journeys. Adrià Gomila presented the urban mobility plan of Barcelona, which aims at reducing the use of cars by 21%. Erik Mark Huitema focused his presentation on the usefulness of big data and predictive analysis to improve mobility. Finally, Mark Rocky presented Indra's vision on multimodality and noted it needs a coherent structure to provide efficient transfer between modes. He concluded that limiting the use of car will need efficient alternatives.





Mobility

Urban mobility infrastructures



18/11/2014 / 15:00-16:15

SPEAKERS

Andrew S. Lynn / Director, Planning & Regional Development - The Port Authority of New York & New Jersey - New York - USA

James Varghese / Principal Secretary Government - Kerala Ministry of Urban Development - Kerala - India

Alfonso Bataller / Mayor - Castelló de la Plana - Spain - Castellón

Alexander Pfurr / CEO - ThyssenKrupp Access Solutions GmbH - Essen - Germany José

Antonio López Becerra / Technology & systems director - SABA - Barcelona - Spain

Josep-Ramon Ferrer i Escoda / Director of Smart City & Deputy CIO - Barcelona City Council - Barcelona - Spain

MODERATOR

Ariella Cohen / Executive Editor - Next City - Philadelphia - USA

Responding to the growing demand for mobility is a common challenge for many large cities. Some strategies deployed to tackle this issue consist of promoting mass transit, fostering multimodality between commuter rail and buses, introducing new technologies and expanding the peak period. In this sense, New York presented its intermodal bus stations scheme. Barcelona pointed out that the key to increasing multimodality lies in integrating all the transport tickets in one single card. Castelló (Spain) presented an integrated platform to collect all the relevant information about mobility in the city and better plan transport strategies. Finally, speakers agreed that carsharing should be considered as a complement to public transport and integrated into the overall city transportation planning.

Mobility

Sustainable urban mobility policies



18/11/2014 / 16:15-17:30

SPEAKERS

Carlos Francisco Melo / Coordinator of Planning and Development - Ministry of Transport and Telecommunications of Chile - Santiago de Chile - Chile

Stefan Atchia / Principal transport policies Specialist - African Development Bank - Abidjan - Ivory Coast

Markus Becker / Advisor - Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety of Germany - Berlin - Germany

Simone Bosetti / Integrated Planning - CIVITAS Initiative - Milan - Italy

Axel Volkery / Research and Innovative Transport Systems, Directorate General for Mobility and Transpor - European Commission - Brussels - Belgium

Jerome Pourbaix / Head of Policy & Outreach - UITP - Brussels - Belgium

MODERATOR

Jaime Moreno / Vice Director of Mobility Management - DGT, Traffic General Directorate - Madrid - Spain

In order to develop efficient transport planning and mobility policies, it is necessary to engage citizens. A top-down approach from national government administration often becomes really expensive, while perceived by population as slow or not useful. This is a lesson Chile learnt recently when it shifted its strategy to local measures combined with citizens engagement, said Carlos Francisco Melo. While in Africa, the main challenge is still related to the financing of the required infrastructure, as Stefan Atchia pointed out, the top priority in the developed countries are sustainability and the reduction of gas emissions. As for Europe, Axel Volkery presented the Market Place of the European Innovation Partnership on Smart Cities and Communities, which considers sustainable urban mobility as a priority area.







Mobility

ITS for urban mobility



19/11/2014 / 14:15-15:30

SPEAKERS

Jan Reitsma / Director - Sensor City foundation - Assen - The Netherlands

Gilles Vesco / Urban Mobility - Grand Lyon - Lyon - France

Vincenzo Marano / Research Associate - University of Salerno - Fisciano - Italy

André Dias / Head of Intelligent Systems - CEIIA - Porto - Portugal

Kiva Allgood / Global Market Development Director - Qualcomm - San Diego - USA

MODERATOR

Jaume Barceló / inLab.FIB - UPC - Barcelona - Spain

What is the real role of data in improving cities' mobility? Jan Reitsma addressed the issue using the example of Sensor City Assen, an innovation platform aimed at optimizing the city's mobility, sound and air quality. Gilles Vesco discussed the experience of Lyon (France) and emphasized that real-time, predictive

and reliable information is crucial. Vincenzo Marano discussed various innovative efforts being made in the realm of automotive technology, such as predictive computing or vehicle-to-vehicle communication to more efficiently navigate through the environment and achieve significant fuel savings.

André Dias presented mobi.me, an urban mobility platform that allows real-time management and monitoring of integrated mobility networks by city officials. Finally, Kiva Allgood gave an overview of Qualcomm's role in helping cities to manage ICT networks.

Mobility

Self-driving cooperative urban vehicles



20/11/2014 / 11:15-12:30

SPEAKERS

Ryan Chin / Managing Director & Research Scientist, City Science Initiative - MIT Media Lab - Cambridge - USA

Carlos Holguin / Project Manager - Centre for Transport and Logistics - University of Rome "La Sapienza" - Rome - Italy

Elettra Stradella / Professor in Comparative Public Law - University of Pisa - Pisa - Italy **Jordi Ortuño Ribé** / Smart Cities Projects Coordinator - IMI Barcelona City Council - Barcelona - Spain

MODERATOR

Alberto Sanfeliu / Full Professor - ECHORD++ PCP in Urban Robotics - UPC - Barcelona - Spain

Self-driving vehicles are moving closer to being a given on city streets. How can this new technology transform our cities? According to Jordi Ortuño Ribé, who presented Barcelona's strategy in support of self-driving, it might enable us to tackle congestion, reduce fatalities and increase the efficiency of public transport. But its introduction prompts a number of questions. The technology is ready, but the investments needed and the adaptation of the regulation will make the introduction of autonomous driving very slow, said Carlos Holguin. For Ryan Chin self-driving has many advantages but it might end up increasing demand for vehicles and congestion. Autonomous vehicles should be complemented by a complete change in the use we make of them.







Mobility

Presentation of the Program to foster Industries related to Sustainable Mobility



20/11/2014 / 12:30-13:45

SPEAKERS

Sergi Barbens / Program Coordinator - Government of Catalonia - Barcelona - Spain

Pere Torres / Secretary-General of Entreprise and Competitiveness - Government of Catalonia - Barcelona - Spain

Antoni Maria Grau / General Director of Industry - Government of Catalonia - Barcelona - Spain

This session was the official presentation of the Program to foster the Industries related to Sustainable Mobility in the region of Catalonia. The program has been developed during 2014 under the leadership of the Industry Department of Generalitat de Catalunya (regional government) and it aims to identify the best strategies to improve the competitiveness of the Catalan industry. It is fully aligned with the European Smart Specialization Strategy, which requires every region to define a set of priority sectors and a specific strategy for each of them. The strategies identified are grouped into the following areas: vehicle industry, connected vehicle, energy for transport and mobility services.

Sustainable City

Planning cities for urban growth



18/11/2014 / 12:15-13:30

SPEAKERS

Taichi Goto / Director General - Fukuoka Directive Council - Fukuoka - Japan

José Torre / Citizen Centered Urbanism - Monterrey Institute of Technology and Higher Education - Garza García, Nuevo Leon - Mexico

 $\textbf{Samuel Mabala-Shbuta} \ / \ \text{Commissioner for urban development - Ministry of lands, housing and urban development of Uganda - Kampala - Uganda}$

Raquel Sánchez Jiménez / Mayor - Gavà city council - Gavà - Spain

Juantxo Guibelalde / Partner everismart social business - Everis - Madrid - Spain

MODERATOR

Álvaro Nicolás-Loscos / Congress Coordinator & Consultant - Smart City Expo World Congress & anteverti - Barcelona - Spain

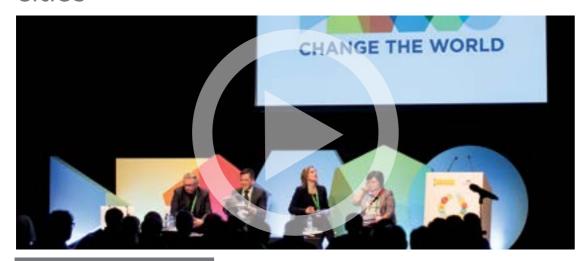
Planning cities for urban growth is key for sustainable development. How are cities coping with this challenge? Taichi Goto explained Fukuoka's main goal is to create more quality jobs to prevent brain drain and become a business hub of East Asia. By contrast, in Mexico, development strategy is based on a neighborhood transformation with the university as a catalyst for urban, social, and economical change, said José Torre. In other latitudes, like Kampala, which is set to develop into a megacity, urban growth is planned according to a radial model, compatible with a transit-oriented development, said Samuel Malaba-Schbuta. Finally, Juantxo Guibelalde closed the session with the presentation of the Smart Waste Management system implemented in Barcelona.







Planning sustainable cities



18/11/2014 / 15:00-16:15

SPEAKERS

Yan Jing Wang / Vice general Manager - CCIAITAB (Internet of Things Application Branch, China Communications Industry Association) - Beijing - China

Andreas Trisko / Head of the Urban Planning and Transport Planning department of the city of Vienna - City of Vienna - Vienna - Austria

Wafa Al-Hameedi / CTO and the Head of IT and Smart City - Emaar, The Economic City - Riyadh - Saudi Arabia

Johnny Wong / Group Director (Building Research Institute) - Housing & Develpment Board (Singapore) - Singapore - Singapore

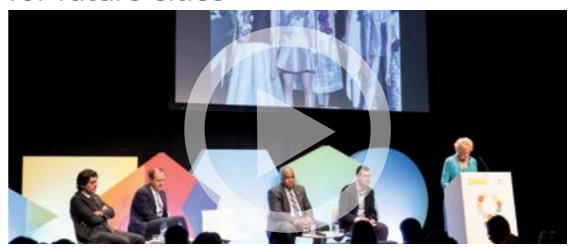
MODERATOR

Cristiana Fragola / Regional Director, Europe - C40 - Milan - Italy

Today, the energy crisis, climate change and severe atmospheric events are a widespread concern. What are the steps to be taken to continue down the path of building more sustainable cities? According to Andreas Trisko, smart cities strategies should address density and focus on the human scale. Similarly, Yan Jing Wang stressed the Chinese commitment to promote "human-centered urbanization". Finally, Johnny Wong explained why Singapore's public housing system -home to over 80% of the resident population- is uniquely different. Then, he presented an ambitious strategy aimed at improving the sustainability of housing conditions through smart enabled homes with energy management systems and sensored lighting.

Sustainable City

Challenges for future cities



18/11/2014 / 16:15-17:30

SPEAKERS

Rob Van Gijzel / Mayor - Municipality of Eindhoven - Eindhoven - The Netherlands

Juan Camilo Quintero / Executive Director - Corporación Ruta N Medellín - Medellín - Colombia

David Howard / City Council member - Charlotte Municipality - Charlotte - USA

Susan Riley / Deputy Lord Mayor - City of Melbourne - Melbourne - Australia

MODERATOR

Lluís Domènech / Director of Architecture - Barcelona Sagrera Alta Velocitat - Barcelona - Spain

Looking at cities in different continents, what is the main problem for each to solve, and where are they focusing their efforts? According to Rob Van Gijzel, cities need to have more autonomy and space to be able to adapt to population growth in a sustainable manner. As for Juan Camilo Quintero, he stressed the importance of establishing corridors between cities to exchange and multiply knowledge, and to resolve common challenges. Susan Riley focused on the measures Melbourne is taking to reduce its environmental impact and the urban heat island effect. Similarly, David Howard talked about the program Charlotte has put in place to reduce energy consumption, as well as water and waste, in commercial buildings.







Liveable equitable cities



19/11/2014 / 14:15-15:30

SPEAKERS

Bilal Hamad / Mayor - Municipality of Beirut - Beirut - Lebanon

Dian Tri Irawaty / Researcher and program manager - Rujak Center for Urban Studies - Jakarta - Indonesia

Victoria Okoye / Creator - African Urbanism - Accra - Ghana

Jorge Pérez Jaramillo / Planning Director - City of Medellín - Medellín - Colombia

Tim Howland / Chairman - Big Belly Solar - Newton - USA

MODERATOR

Sunil Dubey / Senior Advisor - Metropolis World Association - Sydney - Australia

What do cities need to be more liveable? While coming from different parts of the world with different kinds of problems, Bilal Hamad, Dian Tri Irawaty and Victoria Okoye agreed that citizens should be at the center of changes and that the co-production of knowledge should be fostered. Okoye particularly insisted on the fact that in a city like Accra (Ghana), with very low literacy, it is especially challenging and imperative to gather information on how people use public space and to create a roundtable for all stakeholders. Jorge Pérez Jaramillo stressed again the importance of local democratic power through many examples of how Medellín is transforming into a resilient, civic and democratic city. Finally, Tim Howland presented a solution to more efficiently manage the recycling of litter.

Sustainable City

Strategy matters for city development



19/11/2014 / 15:30-16:45

SPEAKERS

Thomas Wright / Executive Director - Regional Plan Association - New York - USA

Ravi Kant / Managing Director - Housing & Urban Development Corporation - New Delhi - India

Erling Fossen / CEO - Oslo Metropolitan Area - Oslo - Norway

Fernando Álvarez de Celis / Director General de Planeamiento del Ministerio de Desarrollo Urbano - Gobierno de la Ciudad de Buenos Aires - Buenos Aires - Argentina

Simon Giles / Digital Cities Lead - Accenture - London - UK

MODERATOR

Damià Calvet / Director Institut Català del Sòl - Generalitat de Catalunya - Barcelona - Spain

The importance of strategic planning in building 21st century cities is beyond discussion. At the metropolitan scale, where governance is challenging, there is a very important space for civic groups and NGOs, as Thomas Wright noted. Moreover, Erling Fossen explained that Oslo is focusing on a multi-scale transportation plan to involve the whole region to attract talent and investment. Ravi Kant recalled the key aspects of smart cities in India, mainly related to governance, better energy management, healthcare or mobility planning. At his turn, Fernando Álvarez de Celis stressed the importance of measuring and monitoring a wide range of sustainability indicators throughout Buenos Aires and the transparency policy applied to the acquired information. Finally, Simon Giles emphasized that strategies should be based on a value framework that is human at heart.





Dimensions of urban resilience



20/11/2014 / 11:15-12:30

SPEAKERS

Michael Berkowitz / Managing Director - 100 Resilient Cities - New York - USA

Kaine Thompson / Chief of Staff - Wellington City Council - Wellington - New Zealand

Manuel Valdes / Manager of Infrastructure and Urban Coordination - Barcelona City Council - Barcelona - Spain

Douglas Ragan / Chief, Youth Unit - UN-HABITAT - Nairobi - Kenya

Mohamed Boussraoui / Executive Officer - United Cities and Local Governments - Barcelona - Spain

MODERATOR

Dan Lewis / Chief, Disaster and Post-Conflict Section - UN Habitat - Nairobi - Kenya

According to 100 Resilient Cities, urban resilience is the capacity of cities to survive, adapt, and grow no matter the chronic stresses they experience. What measures are cities taking in this regard? Kaine Thompson explained that Wellington is strengthening its infrastructures and making sure it builds what it would be rebuilding after a disaster. Manuel Valdés explained that Barcelona has developed a very efficient resilience monitoring and learning system. Douglas Ragan emphasized that aggregating knowledge and empowering youth as leaders is critical for resilience in Africa. Michael Berkowitz brought significant data to the discussion: It has been estimated that cities need \$57T in infrastructure investment through 2030. Eventually, Mohamed Boussraoui pointed out that empowering local governments and creating synergies among cities are key for developing effective resilience strategies.

Sustainable City

Urban environmental technology



20/11/2014 / 12:30-13:45

SPEAKERS

Nora Galparsoro / Councillor for Infrastructures and Urban Services - City of Donostia - Donostia - Spain

Morten Riis / Business Development Manager - Grundfos Holding A/S - Bjerringbro - Denmark **Zoubeir Azouz** / Architect - ZAA - architects - Montreal - Canada

Martino Tran / Senior Research Fellow in Energy & Environment - Oxford University Centre for Environment - Oxford - UK

Alfonso García / Director of Technical Services and Innovation at FCC Environment - FCC Environment - Madrid - Spain

Eduardo Fernández Giménez / I+D+i and Urban Sustainability Director - Urbaser - Madrid - Spain

MODERATOR

Veronica Kuchinow / Resources Specialist and General Manager - Simbiosy, industrial symbiosis - Barcelona - Spain

What are smart cities doing to improve the way in which they manage waste, water or energy consumption? Nora Galparsoro presented the Donostia project to engage citizens in the proper and efficient collection of organic waste. Morten Riis provided important data: If we considered the water lost on leakages around the world annually, 200 million people plus could be provided with drinkable water. Zoubeir Azouz explored the possibilities of combining architecture with data, to make a new approach to sustainability. Alfonso García showed how FCC has been successfully bringing the potential of electric vehicles to waste collector's trucks. Martino Tran demonstrated that urban system's efficiency is directly linked to their interdependency. Finally, Eduardo Fernández shared his experience on the use of quality indicators for better city management.



Solutions for sustainable cities



20/11/2014 / 12:30-13:45

SPEAKERS

Arturo Marquina Abril / Project Manager - Solintel M&P, SL - Madrid - Spain

Sharelynn Moore / VP Corporate Marketing and Public Affairs - Itron, Inc. - Liberty Lake - USA

Josep Maria Salas / Chief Strategy Officer - ENERBYTE - Sant Cugat del Vallès - Spain

Sabine Flores / Project Leader - Metropolregion Hannover Braunschweig Göttingen Wolfsburg - Hannover - Germany

Sophie Demigneux / Arquitecta - Estudio de Urbanismo - Barcelona - Spain **Andres Jaadla** / Director of education and developement - Rakvere Smart House Competence Centre - Rakvere - Estonia

Jutta Friedrichs / Co-founder - Changing Environments.Inc - Somerville - USA **Jörg Sädtler** / Chief Tetris Operator - ParkTAG - Berlin - Germany

Elena Peyró Outeiriño / Socia co-fundadora y CEO - JoinUp - Barcelona - Spain

Jorge García Vidal / Senior Researcher - BSC-CNS, UPC - Barcelona - Spain

MODERATOR

Álvaro Nicolás-Loscos / Congress Coordinator & Consultant - Smart City Expo World Congress & anteverti - Barcelona - Spain

A sustainable world starts with sustainable cities. The session looked at a varied selection of initiatives from small companies, startups and other organizations. Arturo Marquina introduced a solution to improve building climate systems using sound sensors. Sharelynn Moore showed how energy and water utilities can be automated to be as efficient and effective as possible. Sophie Demigneux presented an innovative urban project that uses social networks data to prevent neighborhood degradation. Andres Jadla argued it is possible to dramatically reduce greenhouse gas emissions.

Finally, Enerbyte, the Hannover metropolitan region, ParkTAG, the Barcelona Supercomputer center and Changing Environments made it clear that when you invest in sustainability, the returns are measured in more than just environmental terms.





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