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# smartcity



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Smart City market is likely to be worth a cumulative \$1.565 trillion by 2020 study by Frost & Sullivan

Interview with Karuna Gopal, president of Futuristic Cities

Australia: Newcastle NOW to Newcastle NEXT by Evelyn King

'Come together' by Michael Jansen

Smart Cities and Sports: some examples from the 2014 World Cup by María José Álvarez Gil

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## editorial

**T**he evolution of **SC Actual Smart City** in the nearly three years that have gone by since it was launched has been, above all, exciting. In all modesty and with significant engagement from all agents involved, we have reached the top: we are the world leaders in the sector already, and we have more than **ONE MILLION followers** every month.

But reaching the top is just one small step: now we must really avoid falling down. Keeping the publishing line that brought us to the top and the array of wonderful collaborators we have had will be no easy task, but we will fight to achieve it.

Our first litmus test is the current edition of **SC Actual smart City** which is all in English (with a print version and a digital version), and will have its baptism of fire in New Delhi, in the context of **Smart City India**.

We are rightly proud of this publication having born in Barcelona, which is, without the slightest doubt, one of the key cities in terms of innovation and **Smart Cities worldwide**. Nevertheless, it may clearly be seen that we have an international vision and mission that made it unavoidable to adapt our magazine to a widespread language, and above all, to a language commonly used in countries with the highest level of technological development.

The current issue of **SC Actual Smart City** is also a small tribute to some of our top collaborators, such as Karuna Gopal, Michael Jansen or Saibal Chowdhury, top world gurus we wanted to be present in this baptism.

Drones, diplomacy in smart cities or sports come along with the real leading players in the area: companies, which also have a place in this special edition, from Cisco to Huawei, from Telefónica to Ericsson.

We truly expect the new version of our magazine to continue to be a “must-read” for all stakeholders in the smart city area. We also expect to be able to improve the quality and quantity of our goals from now on.



# KARUNA GOPAL



## A Global Woman

By Jorge González-Páramo Echevarría

*"India wants to infuse 'smartness' into the four pillars of growth: Institutional, Physical, Social and Economic infrastructures"*



## President 'Foundation for Futuristic Cities'

**I**t is an honor for SC Actual Smart City to be able to display the views of one of the world's women involved in the development of cities. Karuna Gopal, president of Futuristic Cities, an internationally acclaimed thought leader, keynote speaker and advisor smart cities, is a great example and role to follow for Indians and for the rest of the planet, where she has also implemented projects, always lead by a heart determined to change the world.

**SCASC.- Prime Minister's ambitious 100 Smart Cities Vision is going to take shape early this year. Many are of the opinion that India doesn't need smart cities at all...**

**K.G.-** I am excited that we embarked on this smart journey at a juncture when the world economy is not so bright. Smart cities present the greatest opportunity for India –opportunity to infuse 'Economic Vitality' into the nation and also to create an 'Equitable Society'.

Well, contrary to the popular perception that smart cities are all about technology, they are actually about livability, sustainability and highest quality of life. Let's understand that, globally speaking, smart cities were a consequence of growing urbanization, inadequate infrastructure, growing economic competition, and increasing environmental challenges. India is currently experiencing all of them. So the question of doubting their relevance in India's context doesn't arise, especially when Indian cities have established themselves as formidable economic engines of growth.

It is adequate to remember that, when IMF Christine Lagarde visited India recently, she did say that India is the only 'Bright Spot' in a largely gloomy global economy, due to its human capital, innovation and entrepreneurship -all of these qualities being an integral part of cities... So cities have to be cherished and nurtured.

**SCASC.- You keep saying that it is 'a perfect time to build SMART CITIES in India'. Why do you say that?**

**K.G.-** I say that because India enjoys a 'Late Mover Advantage' today ... Cities around the world that entered the game almost 10 years ago went through iterations of learning. The Mayors back then had no clue what Smart Cities really were, and had to rely on the advice of technology providers. These technology majors were basically creating a market for their products and services. So, mostly, back then it was a vendor driven sector. Today, there is clarity about what a Smart City really is, and most city leaders are now aware of how they would like to shape their cities and not blindly buy everything sold to them. India escaped this pain. Pain of investments and pain of learning... Back then, technologies were nascent and were not mature enough, the costs too were very high and technology vendors competed aggressively. But today we can see how dramatically different the landscape is! Technologies have matured substantially, their costs have come down drastically and the most beautiful part is that vendors are collaborating instead of competing to give 'wholesome solutions' to the cities! Apart from the above advantages, India is entering at a perfect time when Global Best Practices are availa-

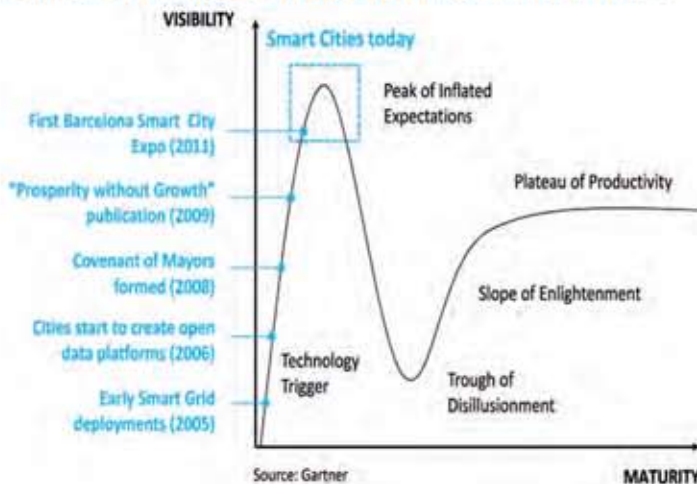
**M**s. Karuna Gopal is an internationally acclaimed Thought Leader, Keynote Speaker and advisor on Smart Cities. Inspired by the vision 'VIBRANT CITIES for a VIBRANT INDIA' her Think Tank has been influencing Urban Transformation in India. Currently FFC is developing a 'SMART CITY Protocol' for Indian Cities collaborating with Technology, Government and Corporate partners. As a member of the US Government's Foreign Leaders Program in 2011, Karuna studied the Smart City approach of not only the United States but 15 other nations as well. She played a key role in forging a Sister State Partnership between Washington State, USA and Andhra Pradesh, India. A sought after speaker, she addressed several conferences around the world. She taught policy makers and senior IAS officers WBI (World Bank Institute) and India's Premier Academy for Civil Service training at (LBSNAA), Mussoorie. Lectures at ISB (Indian School of Business), IIM (A) Indian Institute of Management, IIT (Indian Institute of Technology), BITS Pilani etc. She was associated with the city development and reform projects of DFID (UK), USAID and the World Bank. Ms. Gopal also launched SCULPT YOUR CITY™, CORPORATE FOR CITIES™ and STOC™ – Innovations in Indian landscape. Her team is currently developing a 'SMART CITY Protocol' for Indian cities collaborating with Technology, Government and Corporate partners. This includes a wide range of solutions from developing a framework for Smart Cities, BIG DATA and Predictive analytics for safe cities, City Sentiment Analysis, Situation Awareness Tools (STOC™) and mobile Apps being a few in the suite...

### AWARDS / HONOURS

- PRCI Chanakya Award "Young Visionary 2015"
  - The "50 Most Talented Green Leaders" Award for demonstrating exemplary leadership on SUSTAINABILITY for social change, World CSR Congress 2015
  - Honored for Eminent Leadership & Achievements by Shri Bandaru Dattatreya, Hon'ble Union Minister on International Women's Day, 2015
  - Is the Recipient of "Woman Leader" "Woman Innovator" & "Youth Icon" Awards.
- More from <http://futurecities.org/karunagopal.html>

ble, tested and proven frameworks, indices, protocols are available for ready adoption. Innovative Financing Models are up for takes and PPP frameworks are much more refined. In fact, the world became a R&D laboratory for Smart Cities in the last decade, and India with its late mover advantage can capitalize on this corpus of knowledge.

### INDIA'S ADVANTAGE CAN BE SEEN FROM THIS EXHIBIT:



**SCASC.- What are main things under the Smart Cities Mission of the Government?**

**K.G.-** Our country wants to infuse 'smartness' into the four pillars of growth: Institutional, Physical, Social, and Economic infrastructures. The Mission is about 3 important components –Green Field Development, Redevelopments and Retrofits.

We are trying to use a combination of sustainable urban planning with good design principles and technology solutions wherever necessary. New Green field cities will adhere to good design principles and use less technology, but existing cities with crumbling infrastructure will have to resort to technology solutions.

**SCASC.- What is the Ministry doing now to achieve the stated goals?**

**K.G.-** The Ministry at this time is nuancing the details of

The most important thing the ministry is doing currently is to arrive at appropriate city level Reforms for embarking on this Smart journey. The biggest challenge lies in City level reforms, building city competencies and developing Smart Procurement processes for engaging vendors. Reworking PPP frameworks is taxing and it is being done while the biggest focus is perhaps also on making 'Doing Business in India' easier.

The government is trying to Discover all pathways that lead to achieving the smart cities mission of the PM.

**"Smart cities present the greatest opportunity for India to infuse Economic Vitality into the nation and also to create an Equitable Society"**



**"The world became a R&D laboratory for Smart Cities in the last decade, and India with its late mover advantage can capitalize on this corpus of knowledge"**

the mission. Working on programs to build and enhance technical competencies, creating the required Human Capital. The ministry is developing Smart City Standards, Indices and appropriate Protocols. There is a specific focus on forging Partnerships both local and global. As you know, there are many countries that are approaching India and offering to be a part of this smart city game. These have to be discussed, and MOUs have to be drafted and entered into. Currently such activities are on. The Ministry is also creating a corpus of 'International Best Practices' and is exploring 'Innovative Funding' models that may work on Indian terrain.

**SCASC.- How will the Mission be navigated? We hear there is going to be a challenge for cities to be chosen?**

**K.G.-** Yes, the cities will be selected through City Challenge. There will be 3 phases of selection –City Challenge on the lines of 'Mayors Challenge' of Bloomberg Philanthropy, designed as a "competition for bold ideas from city leaders". Phase-1 (20 cities to be selected in 2015). Remaining should be provided with additional help and resources to prepare them for selection; Phase-2 (40 Cities in 2016), Phase-3 (40 Cities in 2017).

**SCASC.- How will the cities be shortlisted?**

**K.G.-** Here are the details:

- **Economic Criterion:** Cities accounting for 54% of Incremental GDP till 2025 – 69
- **Geographic Inclusivity:** All State Capitals (not included above) – 12  
Tourist/ Religious – Heritage (not included above) – 8  
Hill and Coastal Areas (not included above) – 4

Mid-sized Cities (not included above) – 7

· **The Conditions Precedent:** Municipal Reforms - Double Entry Accounting System , Minimum 50% collection of Taxes and User , Charges, Creation of Municipal Cadre...

· **E-Governance-** Electronic Delivery of Public Services, All Information in Public Domain- Zero Emissions: Solid & Liquid Waste; Master Plan based on Spatial Mapping/GIS..

**SCASC.- Can you elaborate on selected Major**

**“Smart Cities are not only all about technology, they are actually about livability, sustainability and highest quality of life”**

Delhi. To develop a green field smart city in an area of about 20,000 hectares besides smart infrastructure development in two pockets of Delhi, with an areas of 1,00,000 sq mt and 1,20,000 sq mt, and redevelopment of identified areas, in which Spanish agencies could lend technical support.

**France:** Urban development projects in Himachal Pradesh. France is keen on developing Smart Cities having adequate infrastructure and facilities like proper water treatment, waste management, urban transport and street lighting in the state.

**Singapore:** Delhi-Mumbai Industrial Corridor (DMIC), the Chennai-Bangalore Industrial Corridor and the North-East. Singapore could develop a virtual city or a ‘little Singapore’ somewhere along the corridor.

**SCASC.- Are you hopeful about the success of this**



**Investment Plans in India**

**K.G.-** This is the list I am aware of:

**USA:** Anticipated \$41 Billion Private investment pathways into India; partnership on clean water & solid waste management for 500 cities

**Japan:** \$35 Billion—mix of Private & Public investment – DMIC - Japan is providing support of \$4.5 billion in the first phase of these projects through lending by Japan International Cooperation Agency (JICA) and Japan Bank for International Cooperation (JBIC).

**China:** \$20 Billion—A mix of Private&Public investment.

**Germany:** EU 1 Billion on solar capacity for next ten years.

**ADB (Asian Development Bank):** \$2.5 Billion to establish 5 Industrial Zones for Andhra Pradesh; \$63.3 m for North Karnataka Urban Sector Investment Program.

**SPAIN:** MoU would be signed between the two governments with focus on evolving a Master Plan for Smart

**“New Green field cities will adhere to good design principles and use less technology, but existing cities with crumbling infrastructure will have to resort to technology solutions”**

**Mission?**

**K.G.-** Yes, I am more than hopeful! The Mission is being planned in a comprehensive way. The Union Urban Ministry is not going to work in isolation, it will work closely with Ministry of New and Renewable Energy, Environment Ministry, the States and the respective cities. This mission is tied to Swacch Bharat, Digital India and Make in India programs and, most importantly, the concept of ‘Rurbanization’ is an integral part of this mission. Can anything be more comprehensive than this, both in Concept and Design? I am very positive.