



IEEE Smart Cities Initiative

The United Nations predicts a <u>near doubling of city dwellers by 2050</u>. The global population will increase from 7 billion to 9 billion, the UN forecasts, with the urban population to grow between 2.5 billion and 3 billion people in the next 30 years. Preparing for the population growth opens significant opportunities for economic growth but also creates many challenges that municipalities need to address, including:

- high cost of living,
- increased crime rates,
- · massive investments in infrastructure,
- exponential growth of data
- and potential cultural clashes.

IEEE is at the forefront of helping the world address urban population growth by providing education, insight and expertise, and creating a forum for collaboration of all entities involved in planning successful "smart cities." Globally launched by the IEEE Future Directions Committee, the IEEE Smart Cities Initiative is a global, multi-discipline cross-IEEE effort, through which IEEE seeks to help municipalities address the huge demands on land, resources and services associated with population growth.

- Through the IEEE Smart Cities Initiative, IEEE experts will work with local government leaders and city planners around the world to explore the issues and address what's needed to prepare for the everincreasing urban population growth, including engaging and interacting with local inhabitants to increase awareness of their urban environment, leading to the formation of smart cities.
- The IEEE Smart Cities Initiative has already begun piloting this effort, with Guadalajara, Mexico, as its initial participating municipality. A comprehensive city-specific workshop "Smart Cities of the Future" took place in October 2013. IEEE Smart Cities Initiative support is part of a comprehensive strategy for the revival and regeneration of the historic city center. See video on Guadalajara CCD at http://www.carloratti.it/FTP/CCD/index.html.
- Municipalities selected for the IEEE Smart Cities Initiative will gain access to "best-of-breed" technologies and standards and will share their knowledge and best practices within a vibrant community.



Designing successful and sustainable smart cities requires careful planning about citizens' energy, water, transportation, communications, and public health and safety. IEEE has cultivated a powerful and talented brain trust that can assist municipalities in managing the transition to urbanization.

- Gilles Betis, Chair, IEEE Smart Cities Initiative The newly created IEEE Smart Cities Initiative is designed for municipalities in developed and developing countries who are already in the process of planning and preparing for an increase in urban residents. As well as access to expert knowledge and insight, municipalities will benefit from valuable components such as:

- workshops to develop white papers on which future work will be based;
- education resources, including support for Masters and PhD students, thesis
 development in smart cities-related areas and development of smart citiesrelated courses with a focus on "MOOCs" (Massive Open Online Courses);
- organization of a thematic international conference on smart cities
- knowledge base/repository, to serve as a source of lessons learned and other information and intelligence for future smart cities, and
- access to IEEE Distinguished Lecturers.

The IEEE Smart Cities Working Group invites global municipalities to engage in the IEEE Smart Cities Initiative, where successful applicants who meet the criteria will get the opportunity to join the active community of 10 cities through 2016.

Municipalities can download an application form at http://smartcities.ieee.org. The application deadline is Friday 16th May 2014. Successful submissions will provide clear, compelling evidence that the municipality is well-positioned to utilize the resources offered through the IEEE Smart Cities Initiative, that its evolution into a smart city has the potential to substantially enhance a city's capacity to act on key issues, and that the city can demonstrate plans to invest human and financial capital into the project.

The cardinal criteria for selection of these cities will include the following:

- The city has already a concrete plan and funds to become a smart city
- The local constituency will welcome IEEE involvement
- The local authorities have interest in sharing experiences at the international level and becoming a path leader
- There is a local IEEE Chapter and Section to take local responsibility and support the project
- There is a local university interested in working the smart cities space as well as some form of local industry commitment

For more information on the new IEEE Smart Cities Initiative visit the web site at http://smartcities.ieee.org.