City-wide sensor system could make cities run more smoothly

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A city with its own operating system could manage itself more smoothly, according to Living PlanIT. Image credit: PlanIT

(PhysOrg.com) -- By installing millions of sensors throughout a city and hooking them up to an urban operating system, the Portuguese-based company Living PlanIT envisions that, in the future, cities could monitor and manage themselves more efficiently without the need for additional human supervision.

For instance, in the event of a fire in an occupied building, sensors would spot the fire and then flickering lights and alarms would direct people to a safe stairwell and an exit. At the same time, a fire station would be notified and the system would manage the traffic lights so fire engines could reach the building as quickly as possible.

In this way and others, sensors around the city could keep an eye on what's happening and keep things running smoothly. The plan involves using sensors for monitoring everything from traffic flow, energy consumption, water use, waste processing, and the temperature of individual rooms. All these sensors would be connected to the Urban OS, enabling them to communicate with each other. The Urban OS was developed by McLaren Electronic Systems, which makes sensors for Formula One cars.

According to Living PlanIT, this kind of "smart city" could lead to cost savings while improving the quality of life for the people who live there. The company is currently building a demo city called PlanIT Valley, located in southern Portugal near the town of Paredes. Although it will take several years for the city to be built, Living PlanIT hopes that the final outcome will be a city that is more environmentally, socially, and economically sustainable than today's cities.

To support the many applications such a system could have, the Urban OS will run PlaceApps, which is the urban equivalent of apps on a smartphone. Independent developers could also create their own apps for specific uses. Eventually, smartphones could connect to the Urban OS to monitor and control household appliances and energy systems. All this will be possible, according to Living PlanIT, while simultaneously protecting people's security and privacy.

The World Economic Forum recently selected Living PlanIT as one of its Technology Pioneers of 2012 for its work in developing smart cities.

More information: http://living-planit.com
via: The Engineer and BBC News

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