

Press release

Smart Cities: Paradox Engineering presents revolutionary PE Smart Urban Network solution to manage multiple Internet of Things services

PE Smart Urban Network to be showcased simultaneously at Light Fair International 2017 (Philadelphia, US – May 9 to 11, 2017) and Smart Cities India 2017 Expo (New Delhi, India – May 10 to 12, 2017)

Novazzano, Switzerland, May 8th 2017 – Swiss technology company Paradox Engineering announced **PE Smart Urban Network**, the revolutionary and next generation **connectivity platform and applications ecosystem for Smart Cities**. Leveraging the Company's strong innovation capabilities and taking advantage of MinebeaMitsumi's consolidated technology excellence and global market presence, this solution allows to **manage urban services more efficiently** and **improve citizen satisfaction**, making Cities more agreeable, livable and safer.

Globally, over 50% of the population lives in Cities today, and this trend is expected to continue with about 70% doing so by 2050. The speed and scale of urbanization boosts demand for energy, infrastructures, affordable housing, well-connected mobility systems, healthcare and education, as well as quality of life and jobs. Urban infrastructures are under severe stress, and building inclusive, safe, resilient, and sustainable communities is really an unravelling call for most City managers.

PE Smart Urban Network is a **radical breakthrough for Smart Cities**, as it provides a unified, interoperable technology to manage **both Wireless IoT and Wireless Highspeed IoT networks** over the same infrastructure, thus enabling sensor based applications on one hand, and pervasive WiFi and high-bandwidth applications on the other hand.

First launched in 2011 as PE.AMI, the solution evolved over time to enhance the technology and integrate additional smart applications. Through PE Smart Urban Network, Cities can today connect and control a number of services such as **street lighting, public parking, energy distribution, solid waste collection, public WiFi, video surveillance, emergency response support**, and more.

"PE Smart Urban Network is a game changer for Smart Cities and allows to finally move away from siloed, non-integrated technologies imposing the management of urban services one by one. Having one performing and reliable network supporting both Wireless IoT and Wireless Highspeed IoT is the best option for City managers to manage and improve any kind of existing or future service – reconciling a far-sighted Smart perspective with the need of thoughtful, gradual decisions", stated Gianni Minetti, President and CEO, Paradox Engineering SA.

Key features and applications

PE Smart Urban Network is the most flexible and complete Smart City solution on the market. Supporting both **Wireless IoT and Wireless Highspeed IoT**, it allows to connect and manage **any kind of urban object** – streetlights, parking lots, electrical vehicle charging stations, meters, waste bins, traffic lights, video surveillance cameras, city information panels, WiFi hotspots, and more – at the cost of most wireless IoT solutions only.

It provides an **integrated, scalable network** with the most advanced **smart hardware and software components** (PE Smart Nodes, PE Smart Gateways and PE Smart CMS) to build an end-to-end solution granting **top performance** in urban environments. Completely **based on networking standards** (IPv6 and IPv4, 802.15.4g, 6LoWPAN, 802.11 a/b/g/n) and advocating Wi-SUN and LoRa alliances, PE Smart Urban Network **can be expanded over time** to any existing or new sensor and smart application, imposing no limits to possible future developments. The **mesh network** is fully **self-configuring and self-healing**, designed for affordable ease of deployment and auto-commissioning processes.

PE Smart Urban Network's **ready-to-use applications** include:

- **Smart Streetlights** – to manage and control public lighting and save up to 70% of power and greenhouse emissions by defining customized lighting patterns and adjusting brightness against daily solar times, ambient light levels, human or vehicle presence;
- **Smart Parking** – to monitor and control parking facilities, collecting and taking advantage of a full range of parking-related data to increase average usage rates and design additional services, also contributing to reduce traffic congestion and air pollution;
- **Smart Energy** – for utility companies to cost-effectively manage gas, electricity and water distribution networks, enabling remote meter reading and sub-metering, and offering the opportunity to launch tailored accounting and billing schemes;
- **Smart Waste** – to enhance solid waste collection by accurately tracking waste input and optimizing waste truck routes, with the possibility to reduce service costs up to 40% and grow related revenues up to 10%;
- **Pervasive WiFi** – to offer highspeed web connectivity and provide access to communication services, online applications and contents, marketing and infotainment services;

- **Video surveillance, traffic control and emergency response support** – to connect and control IP cameras, surveillance systems, earthquake sensors, and potentially unmanned vehicles to improve public security and fasten law enforcement intervention when needed.

Two leading Smart City events

PE Smart Urban Network is being showcased simultaneously at **Light Fair International 2017** and **Smart Cities India 2017 Expo**, where visitors will be offered the possibility to learn more about Paradox Engineering's technology and the Cities which have already implemented it with successful results.

Taking place in **Philadelphia, US** from **May 9th to 11th** 2017, [Light Fair International](#) is the world's largest annual architectural and commercial lighting event. MinebeaMitsumi is exhibiting for the second year in a row, providing hands-on demonstrations and a wide display of its latest lighting innovations at **booth 3539**, where PE Smart Urban Network is also presented. Paradox Engineering's solution is also among key topics of the workshop "The Evolution of a Smart City Begins with Light", scheduled on May 10 at 2:00 pm at The Hub, booth # 5455, Hall F.

[Smart Cities India 2017 Expo](#) is one of the largest and most authoritative Smart City events in Asia, taking place at **Pragati Maidan, New Delhi** from **May 10th to 12th**, 2017. Paradox Engineering is joining the Swiss Pavilion at **booth C104**, Hall 11, also contributing to two important panel sessions:

- "Communication Network and Infrastructure" – May 11th at 10:00 am (Room A), when the benefits of a wireless platform such as PE Smart Urban Network will be discussed;
- "Swiss innovations for smart cities in India" – May 11th at 11:45 am (Hall B), when technologies for smart and sustainable urbanization will be discussed.

About Paradox Engineering SA

Paradox Engineering SA is a technology company that designs and markets solutions and services to unlock the value of data for smart industrial and urban networks in the Internet of Things (IoT) age. Unique competences in radio design, network design and management, low power consumption and data collection at the heart of Paradox Engineering's technological leadership. The Company conceives and provides open standard wireless sensor network solutions for smart environments, global virtual networks and OEM versions of its core network technologies.

Established in 2005 and headquartered in Switzerland, the Company is part of MinebeaMitsumi Group, leading global provider of Electro Mechanics Solutions™, which acquired full capital and assets of Paradox Engineering SA in July 2015.

For further information: www.pdxeng.ch

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