

Press release

Ultimate cybersecurity and new revenue streams: blockchain changes the game for Open Cities

New PE Smart Urban Network features and components to be launched at Smart City Expo World Congress 2019

Novazzano (Switzerland), November 5th 2019 – Swiss technology company **Paradox Engineering** is further enhancing its [PE Smart Urban Network](#) platform for interoperable Open Cities by integrating **blockchain technology** to grant the highest possible cybersecurity and enable the monetization of urban device-generated data. New components for **smart lighting** and **smart parking** are also being announced.

All new features will be disclosed at **Smart City Expo World Congress**, the international Smart City exhibition taking place in **Barcelona** (Spain) from **November 19th to 21st, 2019**.

"It's time to change the game for Smart Cities: over the edge cybersecurity is in order, as is turning cost saving into revenue generation and boosting new economies. The Internet of Things is not only about connecting devices into an open and interoperable network: it is about information becoming tangible value for the benefit of all, citizens, businesses and city managers", states Gianni Minetti, CEO at Paradox Engineering *"Since the very inception of PE Smart Urban Network, back in 2011, and now as part of MinebeaMitsumi Group and the uCIFI Alliance, we have always envisioned openness and security-by-design. Today, we are moving one step forward by integrating blockchain for cybersecurity and data tokenization".*

The utmost cybersecurity and new business streams for Cities

Cybercrime is a risk that no City can overlook any longer. Today PE Smart Urban Network integrates blockchain technology and makes commissioning and operational procedures of smart urban infrastructures **intrinsically secure**. The combination of blockchain, dedicated hardware security modules on devices, ultra-reliable encryption and other features brings PE Smart Urban Network **at the forefront of cybersecurity**, and allows Cities to move away from the conventional 'bastion defence' paradigm to benefit from security-by-design network systems.

Blockchain technology integrated in Paradox Engineering's platform also allows to **monetize device-related data** from streetlights, parking lots, waste bins, environmental sensors, and other urban objects. Such data can now be transformed into tradable tokens: for instance, the information a parking sensor generates about the car lot being vacant or busy can become a token and traded to offer Smart Parking services. In so doing, parking operators buy "info-tokens" from the City, fuelling their service business; travellers save time and consume less; Cities turn their parking sensor investment into revenues, while benefitting from lower traffic and pollution, and higher quality of life.

“Info-tokens” can stem from virtually any sensors in the City: for example, environmental data (ie. density of PM10 e PM2.5 particulates, carbon monoxide, etc.). can be used for traffic-mitigation applications to dynamically manage restricted traffic zones upon the improvement or worsening of air quality. Universities, startups and any local organization can design innovative applications and services by mashing-up different data streams.

Extending the interoperable PE Smart Urban Network’s portfolio

PE Smart Urban Network is now further enriched by the new **MinebeaMitsumi’s Dual Smart Parking Sensor**, whose coupled magnetic field sensor and radar sensor grant outstanding vehicle detection, and **MinebeaMitsumi’s Smart LED Streetlight**, the energy-efficient LED lamp featuring a novel optical design and a superior utilization factor for higher brightness with lower power consumption.

These innovative components seamlessly integrate the hardware and software portfolio of PE Smart Urban Network’s open IPv6 / 6LoWPAN infrastructure, with its extensible [PE Smart CMS](#), its **PE Smart Nodes and Gateways**. PE Smart Urban Network is a single, interoperable infrastructure managing both **multi-sensor Wireless Internet of Things (IoT) applications** as smart lighting, smart parking, smart waste, etc., and **Wireless Highspeed IoT services** as pervasive WiFi, video surveillance and other high-bandwidth applications.

Showcasing at Smart City Expo World Congress

All news around PE Smart Urban Network will be first introduced at the **Smart City Expo World Congress 2019**. Visitors can live a **hands-on technology experience** and enjoy an **Augmented Reality** immersion into applications for Open Cities at **booth F612 in hall 2**.

A compelling conference program is also available:

- Tuesday, **November 19th 2019 – Interoperability Day, 10am - 5pm** at the **booth**
Paradox Engineering and the [uCiFi Alliance](#) will discuss how standard-based solutions can contribute to the development of Smart Cities and Utilities.
- Wednesday, **November 20th** – Roundtable **“Building the foundations for Smart City success”**
8am - 9.30am at **Hotel Porta Fira** (opposite Smart City Expo World Congress entrance)
Gianni Minetti, CEO at **Paradox Engineering**, and **Paolo Rossi**, Director at Swiss utility [AEM](#), will present the experience of some far-sighted Cities and utilities around the world, with a peculiar focus on openness and on blockchain-based services. *Free entrance for City and utility delegates, [registration](#) is required.*
- Thursday, **November 21st** – Conference session **“Governance Innovation: Agile, Decentralized, Blockchain-powered”**
9.30am - 11.30am in Hall 1 – **Congress Area**, Government & Finance Room
Giorgio Prister, president of **Major Cities Europe**, will discuss with **Gianni Minetti** and **Bruno Opazo Ruiz**, director of the Smart City initiative by the Chilean economic

development agency [CORFO](#), about the future of blockchain powered Open Cities. *Detailed agenda available [here](#).*

About Paradox Engineering

[Paradox Engineering](#) is a technology company that designs and markets Internet of Things solutions for device and data management in smart environments. Established in 2005 and headquartered in Switzerland, the Company is part of MinebeaMitsumi Group, leading global provider of Electro Mechanics Solutions™, and controls Tynode, specialized in Smart Parking technologies.

For further information about PE Smart Urban Network, please visit <https://www.pdxeng.ch/smart-city> and <https://www.pdxeng.ch/interoperability>

Video materials are available on Paradox Engineering's [YouTube channel](#). The [AR Smart City mobile app](#) can be downloaded for free from Apple Store or Google Play to experience a unique Augmented Reality immersion into PE Smart Urban Network and IoT applications for Open Cities.

Media contact

Silvia Vergani, ph. +41 91 233 01 00, e-mail: svergani@pdxeng.ch