**Open API-Based Smart Street Lighting**

Smart street lighting can be complemented with a wide range of IoT applications, such as security systems, environment sensors, traffic monitors, and electric vehicle chargers to name a few. Each of these IoT applications helps authorities collect useful data, which can be processed into meaningful information to better city services and planning. Furthermore, they also directly and indirectly help make citizens’ lives safer and more pleasant.

Pairing connected smart street lights with innovative IoT applications indeed offers remarkable benefits and prepares a city to become a Smart City. There is one big challenge, however! How can the interconnection and interoperability between smart street lights and IoT applications be possible?

Most companies that offer connected lighting solutions today have a closed system (Private API), which hinders interconnection and interoperability in general. Combining IoT applications with such lighting solutions is difficult, if not, impossible.

Fortunately, there are a few smart street lighting companies, such as TVILIGHT and Interact (Philips), that offer solutions based on Open API.

Open API, as the name suggests, is an openly (publicly) available application programming interface, which allows developers have coding access to a proprietary system. In other words, competent developers can easily code/program different systems or applications as per the requirements to establish seamless interconnection and interoperation between them.

Open API also opens room for new innovations. For example, Open API-based future street lights will adapt the color of the path of an emergency vehicle, so the traffic ahead can start clearing before hearing the siren of the emergency vehicle. Another example is the coupling of smart street lights and EV chargers, which can help respond automatically to shave peak loads and protect the grid from collapsing.

The possibilities with interconnection and interoperation through Open API are countless. Smart street lighting solutions based on Open API are just perfect for cities that envision of becoming true smart cities.