**IEEE P802.24**

**Vertical Applications TAG**

|  |  |
| --- | --- |
| Project | IEEE P802.24 Smart Grid Technical Advisory Group |
| Title | **IoT Section 5 contribution** |
| Date Submitted | Submitted: September 17, 2025 |
| Source | Benjamin A. Rolfe (BCA) | Voice: Fax: DeprecatedE-mail: ben.rolfe @ ieee.org |
| Re: | IoT White Paper |
| Abstract |  |
| Purpose | Update the White Paper |
| Notice | This document has been prepared to assist the IEEE P802.24. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.24. |

**Another perspective**

The Internet of Things (IoT) refers to a vast number of “things” that are connected. There are many different kinds of things with different communication requirements. There are different kinds of internets so they can share data with other things, and with other systems such as IoT applications, connected devices, industrial machines and more. Internets can be private or public. Many use cases require internets (interconnected networks) that are managed by an entity, secured, and need to be independent of the public internet infrastructure. Examples of this perspective of IoT include industrial control and monitoring uses such as:

* Machine control and monitoring
* Lighting and Environmental controls
* Video surveillance
* Irrigation systems (smart farming)
* Fire suppression system

Other IoT uses will utilize the public internet to share data, for example the proliferation of consumer uses that provide access to data from your “things” wherever you are. Examples of this perspective of IoT include things such as:

.

* Video doorbells
* Smart thermostats
* Security cameras
* Health & Activity trackers
* Lighting & Electrical Appliances
* Blinds & Shades
* Smart Speakers
* Motion detectors

Common to these IoT uses is the ability to interconnect, using interfaces based on IEEE 802tm standards and internet protocols, increasingly using IPv6, to create high value IoT ecosystems.