LoRa and LoRaWAN Testbeds: a Review

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Abstract
The Internet of Things (IoT) is a fast-growing movement turning devices into always-connected smart devices through the use of communication technologies. This facilitates the creation of smart strategies allowing monitoring and optimization as well as many other new use cases for various sectors. Low Power Wide Area Networks (LPWANs) have enormous potential as they are suited for various IoT applications and each LPWAN technology has certain features, capabilities and limitations. One of these technologies, namely LoRa/LoRaWAN has several promising features and private and public LoRaWANs are increasing worldwide. Similarly, researchers are also starting to study the potential of LoRa and LoRaWANs. This paper examines the work that has already been done and identifies flaws and strengths by performing a comparison of created testbeds. Limitations of LoRaWANs are also identified.