## IoT CHALLENGES & EVOLUTION

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**Abstract:** As a result of rapid social changes, the fundamental human right to information is increasingly linked more closely to the right of access to broadband services. The Internet is no longer just a technology, it becomes a way of life, one of the primary sources of all data categories, and perhaps the most common method of maintaining connectivity. In this context, the European Union Agency for Network and Information Security (ENISA) defines the Internet of Things (IoT) as "a cyber-physical ecosystem of sensors and interconnected action elements that allow intelligent decisions" [3]. However, IP protocols are no longer a sine qua non requirement of the IoT ecosystem, and therefore the word "Internet" in the meaning of IoT should be viewed as a generalization involving the notion of connectivity and should not be interpreted strictly technically. In another expression, the Internet of Things is presented as the entire amount of devices, vehicles, buildings and other electronics, software, and embedded sensors that communicate and exchange data [6]. In IoT environments, a "thing" is a physical or virtual object capable of being identified and integrated into communications networks, and it is imperative that all things be endowed with this connectivity capability alongside other optional features such as detection, recording, storage and processing of data, the execution of applications and / or functions required, Artificial Intelligence (AI), Machine Learning (ML), etc

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