

"Walk & Talk" Digital Transformation through Standardisation: IoT and Edge

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Internet of Things (IoT)

Everything that can be connected will be connected

Any type of devices such as Smart Devices

Constrained devices: Devices with limited resources

constraints on the maximum code complexity (ROM/Flash)

constraints on the size of memory (RAM)

constraints on the amount of computation feasible in a period of time ("processing power") constraints on the available power

constraints on user interface and accessibility in deployment (ability to set keys, update software, etc.).



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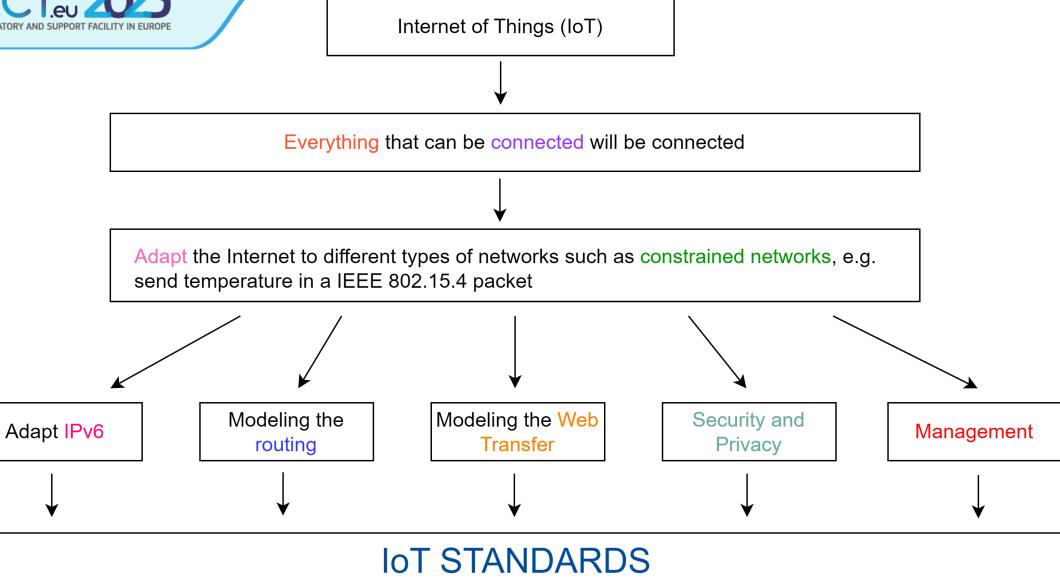
Adapt the Internet to different types of networks such as constrained networks, e.g. send temperature in a IEEE 802.15.4 packet

Constraints may include:

low achievable bitrate/throughput (including limits on duty cycle), high packet loss and high variability of packet loss (delivery rate), highly asymmetric link characteristics,

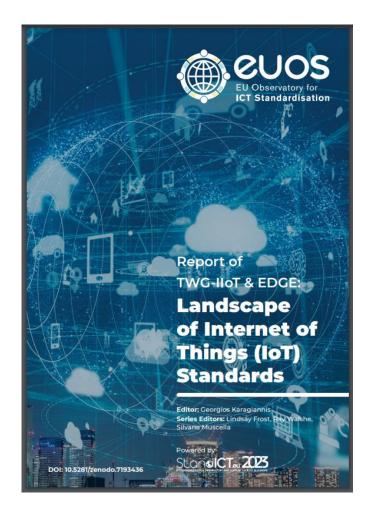
limits on reachability over time (a substantial number of devices may power off at any point in time but periodically "wake up" and can communicate for brief periods of time), lack of (or severe constraints on) advanced services such as IP multicast.

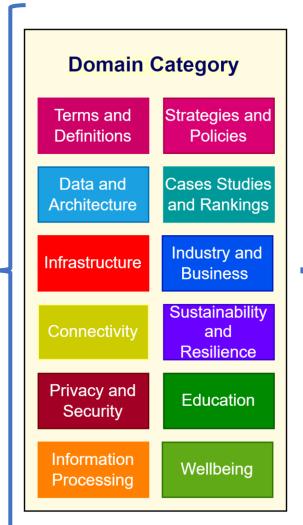


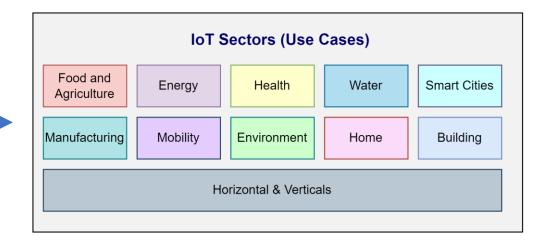




Landscape IoT Standards: Taxonomy



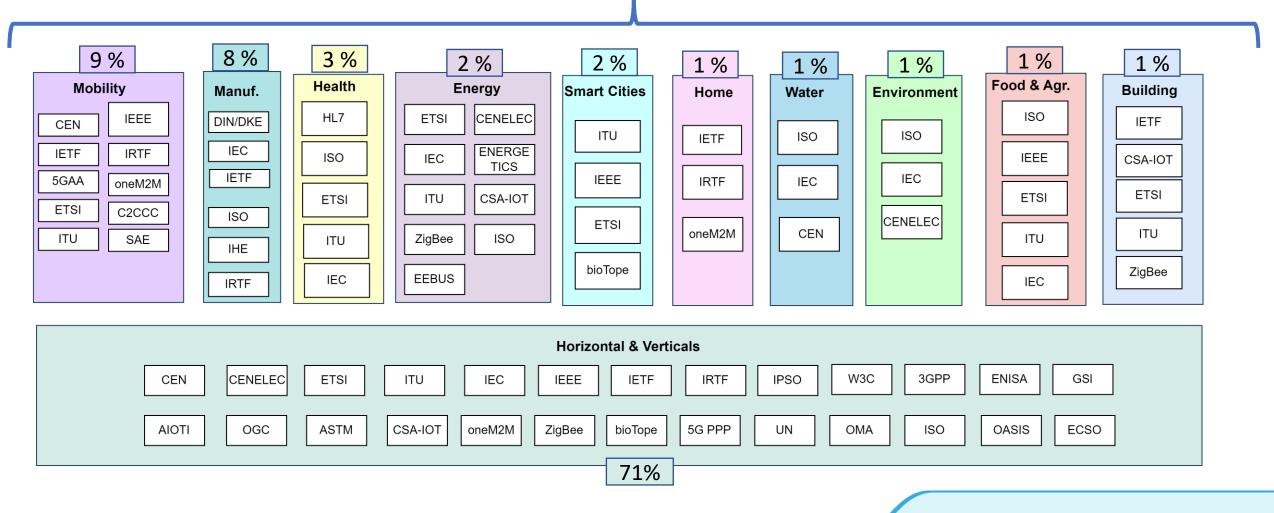








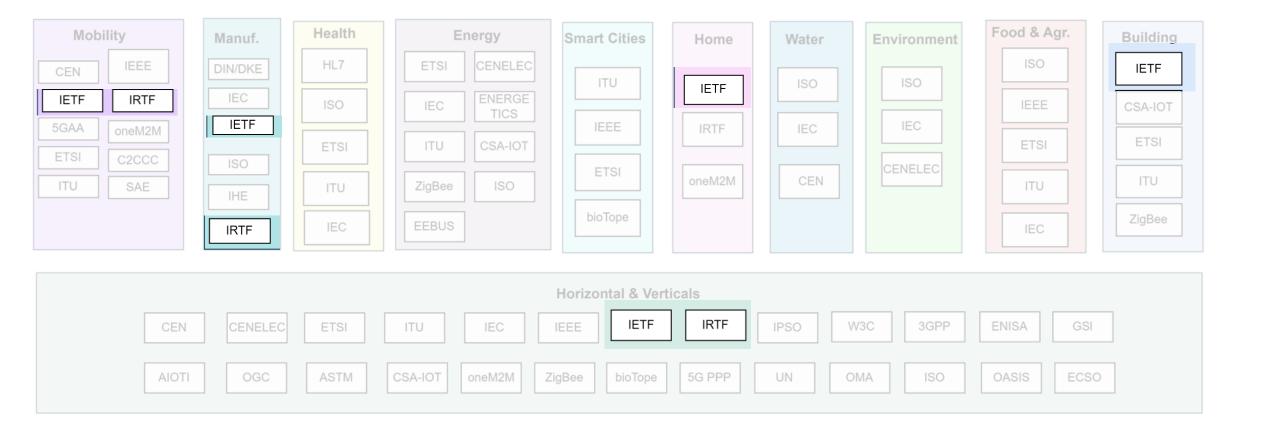
Landscape IoT: SDOs







Landscape IoT: SDOs



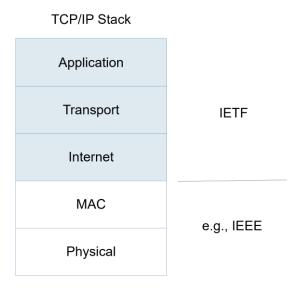


What is the I E T F ?

The Internet Engineering Task Force (IETF) is an **OPEN** international community => make the Internet work better by producing technical documents that influence the way people use the Internet.

IETF Principles

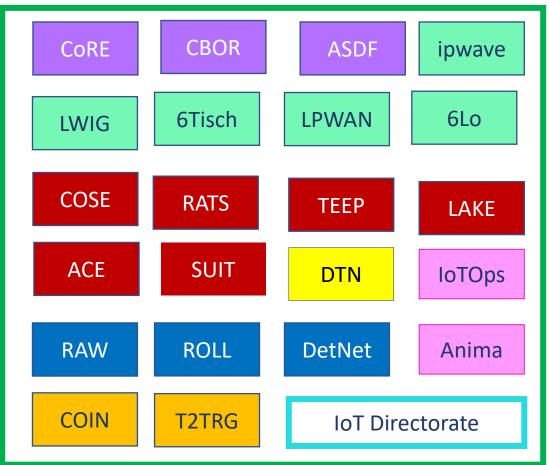
- Open process
- Technical competence
- Volunteer Core
- Protocol ownership
- Rough consensus and running code







IoT - IETF in



IETF Working Group Areas





Thanks from







