5G Initiative – "5G Roadmap" Working Group

Proposal for Contribution

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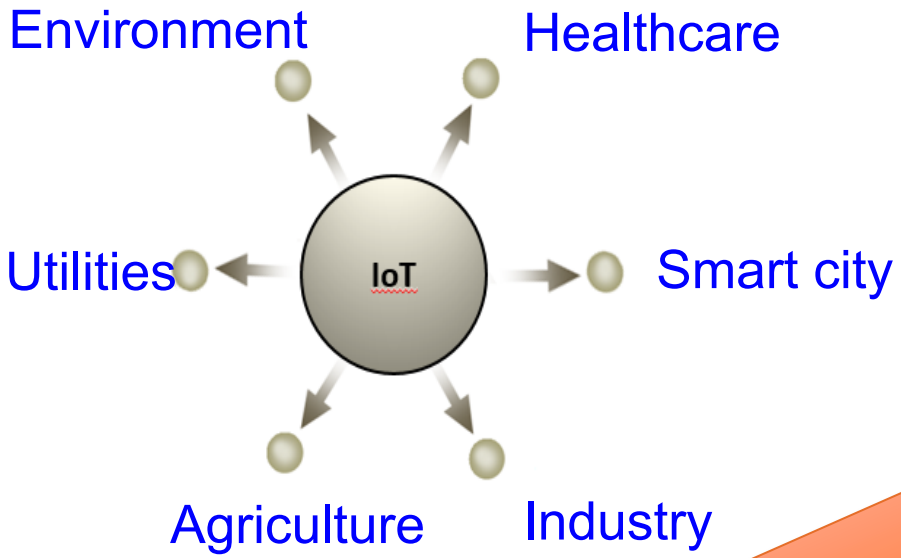
Contribution: “5G empowering IoT” (Octavia Dobre)

- **Topic Field:**
  - wireless, application
- **Impact Horizon**
  - short→medium→long

5G empowering IoT



5G: new waveforms, new radio access technologies

eMTC Cat M, Rel. 13

NB-IoT, Rel. 13

EC-GPRS, Rel. 13

MTC Cat 0, Rel. 12

Solutions to enable IoT within 5G?

I&M: power consumption, RF design, production

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Contribution: "IoT-5G in Metrology" (Octavian Postolache)

- **Topic Field:**
  - application, devices, data format
- **Impact Horizon**
  - short→medium→long

IoT-5G in Metrology

- Measurement data represents key information that will be exchanged within IoT through new 5G implementation

- **Research Objectives**:
  - To develop demonstrators for the 5G communication within the IoT ecosystem providing metrological data exchange in a digital, safe, uniform, unambiguous and highly automated way.
  - To develop an online validation system for the certification of metrological data exchange format.
  - To define rules in order to provide interoperability among the individual systems, and thus, to to assess, structure, and specify requirements and data fields needed for the electronic exchange of measurement data, consistent with SI units in an IoT environment.

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