TF5
Energy/Cost Aware network management

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ACROSS
Autonomous Control for a Reliable Internet of Services
Ongoing activities

• Regular activities
  – Telcos
  – WhitePaper...

• Research

• STSM
Whitepaper

• Supposed to be ready... today
• “Dual use”
  – Research
    • Theoretical
    • Practical (Industry)

Energy vs. QoX network and services management
Whitepaper

• Some common framework/useful tool
• How to deal with multicriteria problems?
  – Common problem in QoE-area
Current research

• Modeling and analysis of performance-energy trade-off in data centers
  – AALTO

• Incorporating Energy and cost to opportunistic QoE-aware scheduling
  – EHU
Future research

• Orchestrating
TF5 and STSM

• Aalto and EHU
  – the emerging topic of the performance-energy trade-off in a 5G system consisting of a macrocell with multiple small cells inside its coverage area that the macro base station is controlling.
  – dynamic policies for serving elastic data traffic in the system so that both delay and energy consumption
  – the main performance metric that affects QoE.
  – idle
TF5 and STSM

- Preliminary results
Future plans

• Publications and joint collaboration EHU, Aalto

• New proposals in 5G

• How to address multicriteria
  – Merging approaches ~ EHU, AALTO
  – Integrate orchestration mechanisms
    • Different loops e2e scenario (TF3)
      – i.e. VNF placement mechanisms in ongoing H2020 5G project