*Global Standards and Successful Partnerships*

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*Enablers of IoT, M2M Services and Applications*

oneM2M steering committee meeting, July 2012

Martin Adolph (ITU Telecommunication Standardization Bureau)

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# ITU in 2012

- UN specialized agency
- 193 Member States
- 700+ industry members
- Universities, R&D
- Strong ties with other specialized agencies, industry associations, SDOs

- Standardization
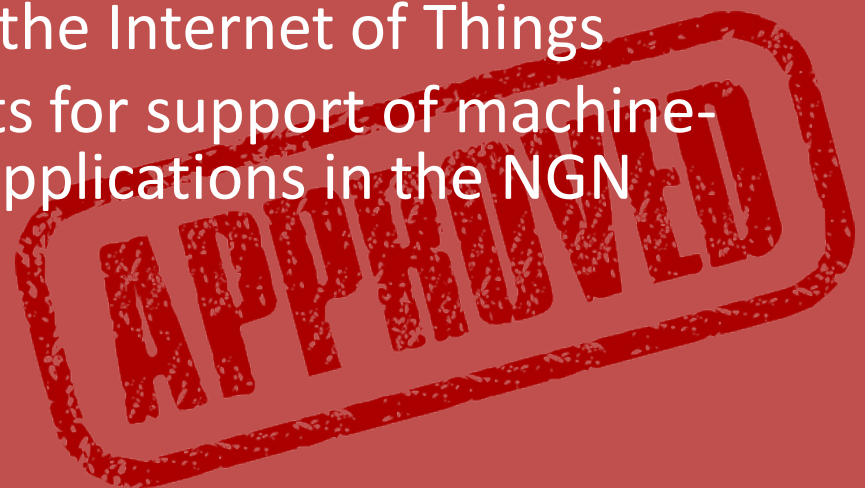- Radiocommunication
- Development

# ITU, M2M and Internet of Things

- ITU-T standards laying the foundation
  - Sensor networks
  - Cloud computing
  - Access networks
  - Multimedia coding
  - QoS/QoE
  - Security

- Standards for smooth operation
  - Tariff and accounting
  - Numbering and addressing
  - Protocols and APIs

- Partnerships and coordination
  - Inter and intra SDO
  - ICT sector, verticals, academia and government organizations

# ITU, M2M and Internet of Things

- Global Standards Initiative on Internet of Things / Joint Coordination Activity
  - Umbrella of IoT standards in ITU-T
  - IoT standards roadmap
  - Collaboration with SDOs and other organizations worldwide
- Approved in June 2012:
  - ITU-T Y.2060, Overview of the Internet of Things
  - ITU-T Y.2061, Requirements for support of machine-oriented communication applications in the NGN environment

# Focus Group on M2M service layer

- Study requirements and specifications for a common M2M service layer

- Initial focus: <u>M2M healthcare</u>, APIs and protocols supporting e-health applications and services

- Deliverables will feed into ITU-T Study Group on Protocols and APIs

- Review and re-use of existing material

*Get involved: http://www.itu.int/en/ITU-T/focusgroups/m2m/*

# Focus Group on M2M service layer

- 2012:
  - 17-18 April (Geneva, ITU)
  - 26-28 June (Beijing, hosted by CCSA/CATR)
  - **29-31 August (Geneva, ITU)**
  - 13-15 November (San Jose, U.S., hosted by Cisco)
- Attracts <u>non-members</u> and <u>non-ICT</u> <u>stakeholders</u>
- Involvement of healthcare sector and its SDOs

*Get involved: http://www.itu.int/en/ITU-T/focusgroups/m2m/*

# ITU-T standards enabling M2M in other sectors

- **Utilities and home automation**
  - Networking over power lines, phone lines and coaxial cables:
    - ITU-T G.hn
  - Narrow-band PLC
    - ITU-T G.hnem

- **Transportation**
  - Creation of an internationally accepted, globally harmonized set of ITS communications standards
  - Use ICT to increase road safety and reduce driver distraction

# ITU-T standards enabling M2M in other sectors

- Digital signage / DOOH
- ICT for smart water management (workshop in Egypt, September 2012)
- ICT for disaster relief and resilience (new Focus Group)
- Using undersea telecommunications cables to monitor ocean floors and the climate (taskforce with UNESCO/IOC and WMO)
- ...

# Concluding thoughts

- Not all M2M related work done at ITU is branded with M2M logo

- FG M2M successfully launched, initially exploring healthcare apps - a niche but important market sector

- Increase in partnerships, industry and standards collaboration

- Cross-sectoral impact of ICT and standards will be major topic later this year, at Global Standards Symposium and WTSA, November, Dubai

# Thank you!



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