Collaboration for Market Relevant IoT Standards
About the IEC

World’s leading provider of International Standards and Conformity Assessment Systems in Electrotechnology

171 Countries
204 Committees
20 000 Experts

10 000 International Standards
4 Conformity Assessment Systems
1 million Certificates
Digitization and connectivity of devices and equipment in industrial automation, power systems and buildings

What is changing today

Massive use of mobile devices
+ Ubiquitous and cheap sensors
+ Sophisticated AI algorithms
+ Huge amounts of data
Do we need IoT standards?

Too few or too many standards?
One size does not fit all
Don’t dream about convergence, multiple protocols will coexist
Don’t reinvent the wheel, look at successful consortia (e.g. Bluetooth)
Data standards will be driven by AI
Focus on critical issues (e.g. security)
ISO/IEC JTC 1/SC 41 (IoT)
Collaboration for IoT standards

Definitions and vocabulary
Reference architectures
Use cases | IEC 62559 methodology
Semantic interoperability
Data related issues for machine learning (data quality & reliability, bias in training data …)
Trustworthiness & ethical challenges
Takeaways

SDOs need to reinvent themselves and become more flexible, agile and open

Coherence helps drive market adoption

SDOs should not replicate what consortia have successfully developed, but partner with them

Data standardization and trustworthiness are critical topics for successful IoT/AI integration