Standardization activities in ITU-T Q4/20

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Web of Things

- Y.4400 (07/2012) Framework of the web of things

- Y.4414 (11/2015) Web of things service architecture

- Y.4452 (09/2016) Functional framework of web of objects

- Y.4415 (06/2018) Architecture of web of objects-based virtual home network

ITU-T FG-DPM - list of Deliverables

All 15 Deliverables: https://www.itu.int/pub/T-FG-DPM

Deliverable	Title	Output document
D0.1	Technical Specification "Data Processing and Management for IoT and Smart Cities and Communities: Vocabulary"	FG-DPM-O-172-R2
D0.2	Technical Report "Data Processing and management for IoT and smart cities and communities: methodology for data processing and management concept building"	FG-DPM-O-173-R1
D1.1	Technical Specification "Use case analysis and requirements for data processing and management to support IoT and smart cities and communities"	FG-DPM-O-174-R1
D2.1	**Technical Specification "Data processing and management framework for IoT and smart Cities and communities"**	FG-DPM-O-175-R3
D2.3	Technical Report "Web based data model for IoT and smart city"	FG-DPM-O-176
D3.2	Technical Specification "SensorThings API – Sensing"	FG-DPM-O-156
D3.3	Technical Specification "Framework to support data interoperability in IoT environments"	FG-DPM-O-157
D3.5	Technical Report "Overview of blockchain for supporting IoT and SC&C in DPM aspects"	FG-DPM-O-151
D3.6	Technical Specification "Blockchain-based data exchange and sharing for supporting IoT and SC&C"	FG-DPM-O-177
D3.7	Technical Specification "Blockchain-based data management for supporting IoT and SC&C"	FG-DPM-O-152
D3.8	Technical Specification "Identity framework in blockchain to support DPM for IoT and SC&C"	FG-DPM-O-178
D4.1	Technical Report "Framework for security, privacy, risk and governance in data processing and management"	FG-DPM-O-170-R1
D4.3	Technical Report "Overview of technical enablers for trusted data"	FG-DPM-O-168-R2
D4.4	Technical Report "Framework to support data quality management in IoT"	FG-DPM-O-171-R1
D5	Technical Specification "Data economy: commercialization, ecosystem and impact assessment"	FG-DPM-O-169

FG-DPM: Focus Group on Data Processing and Management for IoT and SC&C

Q4/20

Data analytics, sharing, processing and management, including big data aspects, of IoT and SC&C

- methodology for DPM concept building based on use cases, requirements analysis

- data value chain, data lifecycle, capabilities and functional architectures to support DPM including big data aspects for IoT and SC&C

- data analytics and data sharing to support data-driven intelligent services and applications for IoT and SC&C

- tools, mechanisms and standardized interfaces for data analytics and data sharing

- DPM, data analytics and sharing with support of emerging technologies (e.g., blockchain, artificial intelligence and digital twin, etc.) in IoT and SC&C

- governance, security, privacy protection and risk management for IoT and SC&C

- trusted data and data quality management for IoT and SC&C

Related Work Items in Q4/20

- DPM related items
  - Published: Y.4560 (Y.DPM-BC-ES), Y.4561 (Y.DPM-BC-DM), Y.Sup69 (Web-based data model)
  - Ongoing WIs: Y.DPM-framework, Y.DPM-interop, Y.DPM-qm
- Other data related items
  - Y.cii (IoT related data from city infrastructure)
  - Y.DFR-SM (data format for smart metering systems)
  - Y.energy-data (energy data sharing and analytics)
  - Y.STIS-fm (metadata of spatiotemporal Information Service)
  - Others: Y.eHealth-Semantic (semantic mediation), Y.IoT-SPWE (safety protection), Y.UIM-cs-framework (crowdsourcing), etc.

Collaboration

- W3C
  - Web of Things
- IEEE
  - The Global Observatory for Urban Intelligence
- AIOTI
  - Data spaces