ITU-T Liaison

Summary
Work related to IETF

Scott Mansfield
Ericsson
IETF Impact

• Technical Impact
  • Liaisons on various topics
    • OTNT
    • Packet Loss Measurement
    • Service Function Chaining
    • End-to-End Network Slicing
    • Machine Learning
    • Autonomous Networks
    • IPtv
  • ITU-T Focus for 2022-2024
    • Quantum
    • Digital Twins
    • AI/ML – ML Dataset
    • Network and Computing Convergence
    • TestBeds

• Policy Impact
  • Protocol Consolidation
  • Green
  • Privacy/Trust

• Geo-political Impact
  • Influence of Regions and Regional Standards
<table>
<thead>
<tr>
<th>Date</th>
<th>From</th>
<th>To</th>
<th>Deadline</th>
<th>Title</th>
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<tbody>
<tr>
<td>7/21/2022</td>
<td>ITU-T-SG-11</td>
<td>IETF</td>
<td></td>
<td>LS on the initiation of a new work item Q.Scvh-iplot “Interoperability testing between SDN and hypervisor based computing virtualization”</td>
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<td>7/20/2022</td>
<td>ITU-T-SG-13</td>
<td>IETF</td>
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<td>LS on the approval of a new ITU-T Supplement on use cases for autonomous networks</td>
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<td>1/18/2022</td>
<td>ITU-T-SG-13</td>
<td>IETF</td>
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<td>LS on the new work item on “Requirements and framework of Service Function Orchestration based on SFC (Y.SFO)”</td>
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<td>1/5/2022</td>
<td>ITU-T-SG-15</td>
<td>IETF</td>
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<td>LS on Coordination of information and data modelling work</td>
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Recent Drafts related to Trust and Quantum

• Trust Related

• Quantum Related
  • Draft new Supplement ITU-T Y.supp.QKDN-roadmap: "Standardization roadmap on Quantum Key Distribution Networks“
  • Draft Recommendation ITU-T Y.QKDN-rsfr: "Quantum key distribution networks - resilience framework“
  • Draft Recommendation ITU-T Y.QKDN-ml-fra: "Quantum key distribution networks - functional requirements and architecture to enable machine learning“
  • Draft Recommendation ITU-T Y.QKDN-iwrg: "Quantum key distribution networks - interworking requirements“
  • Draft Recommendation ITU-T Y.QKDN-iwfr: "Quantum key distribution networks - interworking framework“
SG13 Activities

• **JCA-IMT2020** (5G and Beyond)

• **JCA-IdM** (Identity Management)

• **FG-AN** (Focus Group on Autonomous Networks) (**Status**)

• Correspondance Group on ML Datasets
  
  • A standardization approach for datasets applicable for AI/ML in networks (including allied aspects such as data models, metadata and impact on the networks of AI/ML techniques in relation with this study)

• AI standard roadmap (Y.sup.aisr)
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<tr>
<th>Q</th>
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<tr>
<td>Q20</td>
<td>Draft new Technical Report ITU-T TR.Reqs-SAN &quot;Requirements of semantic-aware networking for future networks &quot;</td>
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<tr>
<td>Q20</td>
<td>Draft new Recommendation ITU-T.Y.IMT2020-NFC-req &quot;Use cases and requirements for network function communication between 5G Public Networks and Non Public Networks in IMT-2020&quot;</td>
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<td>Q21</td>
<td>Revision ITU-T Y.Supplement 59 &quot;IMT-2020 standardization roadmap.”</td>
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<td>Q22</td>
<td>New draft Recommendation Y.ICN-UP “Information-centric networking in networks beyond IMT-2020: Requirements and functional framework of ICN-enabled user plane”</td>
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<tr>
<td>Q22</td>
<td>New draft Recommendation Y.ICN-INP “Information-centric networking networks beyond IMT-2020: Requirements and capabilities of ICN node to support in-network processing”</td>
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<td>Q23</td>
<td>New draft Recommendation ITU-T.Y.FMSC-ABC-req “Fixed, mobile and satellite convergence - Requirements of supporting airborne broadband communication in IMT-2020 networks and beyond”</td>
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<td>Q23</td>
<td>New draft Recommendation Y.FMSC-HAP-req “Fixed, mobile and satellite convergence - Requirements of supporting High Altitude Platform in IMT-2020 network and beyond”</td>
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<td>Q23</td>
<td>New draft Recommendation ITU-T.Y.FMSC-PC “Fixed, mobile and satellite convergence - Policy control for IMT-2020 and beyond”</td>
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<td>Q23</td>
<td>New draft Recommendation ITU-T.Y.FMSC-LDS “Fixed, mobile and satellite convergence - Local data switching for IMT-2020 and beyond”</td>
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<td>Q23</td>
<td>New draft Recommendation ITU-T.Y.FMSC-P2P “Fixed, mobile and satellite convergence - Peer-to-Peer services for IMT-2020 network and beyond”</td>
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Upcoming Meetings

• SG20 (Internet of things (IoT) and smart cities and communities (SC&C))
  • Lead Study Group Roles
    • Internet of Things and its applications
    • Smart cities and communities and related digital services
    • Internet of Things identification
    • Digital health related to Internet of Things and smart cities and communities

• SG17 (Security)
  • Lead Study Group Roles
    • Security
    • Identity management (IdM)
    • Languages and description techniques

• SG15 (Networks, technologies and infrastructures for transport, access and home)
Joint Collaboration Agreements

• JCA-IMT2020 (IMT2020 and Beyond)
  • https://www.itu.int/en/ITU-T/jca/imt2020/Pages/default.aspx
  • JCA IMT2020 Roadmap

• JCA-IoT and SC&C (Internet of Things and Smart Cities and Communities)
  • https://www.itu.int/en/ITU-T/jca/iot/Pages/default.aspx

• JCA-IdM (Identity Management)
  • https://www.itu.int/en/ITU-T/jca/idm/Pages/default.aspx
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<td>D1.1</td>
<td>Quantum information technology for networks terminology: Network aspects of quantum information technologies</td>
<td>PDF</td>
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<tr>
<td>D1.2</td>
<td>Quantum information technology for networks use cases: Network aspects of quantum information technologies</td>
<td>PDF</td>
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<tr>
<td>D1.4</td>
<td>Standardization outlook and technology maturity: Network aspects of quantum information technologies</td>
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<td>D2.1</td>
<td>Quantum information technology for networks terminology: Quantum key distribution network</td>
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<td>Quantum key distribution network protocols: Quantum layer</td>
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<td>Quantum key distribution network protocols: Key management layer, QKDN control layer, and QKDN management layer</td>
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<td>Quantum key distribution network transport technologies</td>
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Document with suggested way forward: [link](#)
WTSA Outcomes


• All Resolutions and Opinions: https://www.itu.int/pub/T-RES

• Hot Topics
  • Open Networks including Standardization of Open Access Networks
    • No agreement on text or resolution

• No Russian delegates in leadership positions
WTDC Outcomes

• IPv6+

• A Chinese proposal to include reference to “define IPv6+” in Res 63 (deployment of IPv6 in developing nations) was not approved.
  • Point repeated by many Member States is that IP is defined by IETF.

• An Arab proposal for a New Resolution entitled “Promotion of global development and adoption of Open Radio Access Networks”
  • This was a carry over of attempts to get an Open RAN resolution at ITU-T
  • A new resolution was rejected
  • Open RAN language was added to Res 37 “Bridging the Digital Divide” was agreed, the following language was added:
    • instructed BDT to increase awareness and understanding about disaggregated, open, and interoperable networks and to facilitate information sharing about open network technologies.

• No Russian delegates in leadership positions
PP-2022 Themes and Hot Topics

• ITU: https://pp22.itu.int/en/
• Host: https://bucharestpp22.gov.ro/
• Topics
  • Internet Governance
  • AI
    • Desire for a resolution
  • Open RAN
    • Continued discussion although there doesn’t seem to be regional support from Americas
  • Cybersecurity
Upcoming meetings

- SG20 (Underway the same week as IETF 114)
- SG17 (August 2022)
- SG15 (September 2022)
- PP-2022 (October 2022)
- TSAG (December 2022)
- WRC-2023 (November 2023)