

JCA-IMT2020 Overview



Introduction



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What is a JCA?



- Joint Coordination Activities (Described in ITU-T A.1)
 - Meant to coordinate the work of more than one study group on a particular topic
 - May also include invited experts and invited representatives of other SDOs
 - Aims mainly at improving coordination and planning.
- Open to ITU Members and designated representatives of relevant Standards Development Organizations and Forums
- The work specific to the topic is conducted by the relevant study groups, external sdos, or open-source communities using the approval process of the parent organization

JCA-IMT2020



- Website: <https://www.itu.int/en/ITU-T/jca/imt2020/Pages/default.aspx>
- The scope of JCA-IMT2020 is coordination of the ITU-T IMT2020 standardization work with focus on non-radio aspects within ITU-T and coordination of the communication with standards development organizations, consortia and forums also working on IMT2020 related standards.
- Groups actively being engaged:
 - In the ITU-T: Study Group 2 on Network Management, Study Group 11 on protocols and interoperability, Study Group 12 on QoS, Study Group 15 on transport, fronthaul/ backhaul and Study Group 17 on security
 - SDO Community: 3GPP, BBF, ETSI, IEEE, IETF, MEF, NGMN, and ONF
 - Open Source Community: mainly ONAP

JCA-IMT2020 Activities



- Maintain a roadmap of material sent to the JCA capturing work on-going in the ecosystem.
- Provide a point of coordination between the ITU-T Study Groups to ensure IMT2020 work is not duplicated or work that needs to get done is missed.
- Provide a point of contact for other SDOs if they are looking for relevant work in the ITU-T.
- Advocate for “Dual-Participation”
 - Dual-Participation means that there are people in both (or more) organizations working to accept and drive the perspective from the other organization. For example, if ITU-T SG13 wants to influence BBF, it is more effective to have an advocate in the BBF that can represent the position of SG13. Tossing liaisons without the support of individuals is not effective.
 - Dual-Participation is also the only way to engage the open-source community. The open-source community wants contributions, not liaisons about potential contributions.
 - Dual-Participation is a proven way to have effective coordination between different standards bodies.

JCA-IMT2020 Meetings



- There have been two JCA-IMT2020 Meetings
- Input has been received from many SDOs
 - Roadmap being kept up-to-date
- All of the Documents for the JCA are not public (behind a TIES account)
 - <https://www.itu.int/ifa/t/jca/IMT2020>
- However the Roadmap is public
 - <https://www.itu.int/net4/ITU-T/roadmap/>
- NEXT Meeting
 - 3rd Meeting
 - 13 April 2018, 16:00 - 17:30
 - Geneva, Switzerland
 - [Meeting Announcement](#)
 - [Registration Link](#)

IMT2020 Roadmap

- <https://www.itu.int/net4/ITU-T/roadmap/>
- The Roadmap is work in progress.
- The ITU-T has created an online database that allows the user to select the subset of information they want to see and then export the information for offline viewing.
- More meta-data is needed in the roadmap



SHOW ROADMAP FOR

All / IMT-2020

REFINE BY

STANDARDISATION BODY

All

IEEE
NGMN
ITU-R
ITU-T SG13
ITU-T SG17
ITU-T SG20



Results: 58 found(s)



Architectural Proposal for the Handling of Network Operations Data with Specific Focus on Virtualized Networks

Subject: Network Management & Orchestration

Responsible group: NGMN

Topic(s): IMT-2020

Final Report on 5G NSA & SA IoT

Subject: Trial & Testing

Responsible group: NGMN

Topic(s): IMT-2020

Final report on 5G pre-commercial trials

Subject: Trial & Testing

Responsible group: NGMN

Topic(s): IMT-2020

First Version of Framework document to 3GPP and others

SG13 WP1 IMT2020 Work



- Defined “Technology Packages”
- Softwarization
- Fixed Mobile Convergence
- Information Centric Networking
- QoS

- SG13 is looking at the opportunity to work with SG2 on the Network Management aspects of IMT2020.

Technology Package: Softwarization



Area	Full title of document	Status (Nov.)	Approved/Planned
Terms & definitions	Y.3100, "Terms and definitions for IMT-2020 network"	Published	13 September 2017
Management framework	Y.3111, "IMT-2020 Network Management Framework"	Published	13 September 2017
Management requirements	Y.3110, "IMT-2020 Network Management Requirements"	Published	13 September 2017
Activity report – NW SWarisation Supplement	Y.3100-series Supplement 44, "Standardization and open source activities related to network softwarization of IMT-2020"	Published	14 July 2017
Frameworks	Y.IMT2020-frame, "Framework of IMT-2020 network"	Ongoing	Apr-2018
Requirements	Y.3101, "Requirements of IMT-2020 network"	Consented	17 Nov-2017
Architecture	Y.IMT2020-arch, "Architecture of IMT-2020 network"	Ongoing	Nov-2018
Orchestration for slices	Y.NSOM, "Network slicing orchestration and management:"	Ongoing	Apr-2018
Framework for multiple slice support	Y.IMT2020-MultiSL, "Framework for the support of Multiple Network Slicing"	Ongoing	Jul-2018
Requirements of network capability exposure	Y.IMT2020-CE-Req, "Requirements of network capability exposure in IMT-2020 networks"	Ongoing	Nov-2018
Potential directions	Y.3150, "High level technical characteristic of network softwarization for IMT-2020"	Consented	17 Nov-2017
	Y.AMC, "Requirements and Architectural Framework for Autonomic Management and Control of IMT-2020 Networks"	Ongoing	Jul-2018
	Y.IMT2020-ADDP, "Advanced Data Plane Programmability for IMT-2020"	Ongoing	2019
	Y.IMT2020-CEF, "Network capability exposure function in IMT-2020 networks"	Ongoing	2019
	Y.IMT2020-BM, "Business models of IMT-2020"	Ongoing	Apr-2018

Technology Package: FMC



Area	Full title of document	Status (July 17)	Approved/Planned
Requirements for FMC	Y.3130, "Requirements of IMT-2020 fixed- mobile convergence"	Consented	17 Nov-2017
Arch for FMC	Y.FMC-ARCH Functional architecture for supporting fixed mobile convergence in IMT-2020 networks	Ongoing	Nov-2018
Mobility management	Y.MM-RN - Mobility management framework over reconfigurable networks	Ongoing	Nov-2018
Mobility management	Y.FMC-MM - Mobility management for fixed mobile convergence in IMT-2020 networks	New WI	2019
Requirements on mgm	Y.FMC-MO-reg, "IMT-2020 FMC functional requirements for management and orchestration"	New WI	Nov-2018
Service scheduling	Y.FMC-SS, "Service scheduling for supporting FMC in IMT-2020 network"	New WI	2019
Capability exposure	Y.FMC-CE, "Capability exposure enhancement for supporting FMC in IMT-2020 network"	New WI	2019



Technology Package: ICN

Area	Full title of document	Status (Nov'17)	Approved/Planned
Data Aware Networking	Y.3071, "Data Aware Networking (Information Centric Networking) - Requirements and Capabilities"	Published	29 March 2017
ICN	Y.3070-series supplement "Information-Centric Networking - Overview, Standardization Gaps and Proof-of-Concept"	Ongoing	Apr-2018
	Y.ICN-FnChain "Framework for service function chaining in ICN"	Ongoing	Nov-2018
	Y.ICN-ReqN "Requirements of ICN naming and name resolution in IMT- 2020"	Ongoing	Nov-2018
	Y.ICN-DS-framework "Framework for Directory Service for Management of a Huge Number of Heterogeneously Named Objects in IMT-2020"	Ongoing	Nov-2018
	Y.SuppICN-PoC-DaaS "PoC for IoT Data as a Service using ICN in IMT- 2020"	Ongoing	Apr-2018

SG15 Work on 5G



- The ITU-T Technical Report – [GSTR-TN5G "Transport network support of IMT-2020/5G"](#) – provides a reference model for the 5G transport network, with particular focus on the interfaces between 5G entities and the transport network. The report's primary aim is to identify the 5G architectures and interfaces of importance to ITU-T SG15.
- UML-based modeling work is being handled in Q14/15
- Architecture work for Transport in Q12/15
- Protocol-based work in Q11/15

Workshops Related to 5G



- Joint IEEE 802 and ITU-T Study Group 15 workshop “Building Tomorrow’s Networks”
 - <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20180127/Pages/default.aspx>
 - <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20180127/Pages/Programme.aspx>
- ITU Workshop on “Machine Learning for 5G and beyond”
 - <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20180129/Pages/default.aspx>
 - <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20180129/Pages/Programme.aspx>
- ITU – ETSI joint workshop “Towards Setting Environmental Requirements for 5G”
 - <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20171123/Pages/default.aspx>
- ITU Workshop on “5G, EMF & Health”
 - <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20171205/Pages/default.aspx>
- Second Joint ITU-NGMN Alliance Workshop on Open Source and Standards for 5G
 - This one was mainly focused on IPR and Copyright issues related to open-source
 - <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/itu-ngmn/Pages/20170111.aspx>
- Workshop on the evolution of transport networks to support IMT-2020/5G
 - <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20171016/Pages/default.aspx>
- IMT-2020/5G Workshop and Demo Day
 - <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/201707/Pages/default.aspx>

Future Activities



- JCA-IMT2020 Meeting in April
 - 3rd Meeting, 13 April 2018, 16:00 - 17:30, Geneva, Switzerland
 - https://www.itu.int/en/ITU-T/jca/imt2020/Documents/JCA%20IMT2020-Apr2018_meeting-announcement.pdf
- Hosting JCA-IMT2020 outside of ITU-T SG13
 - Looking at potential JCA @ BBF meeting in Osaka in June
 - SG15 Meeting in October
 - IEEE 5G Initiative Standards Working Group
 - eMeetings to progress coordination when necessary
- Workshops
 - ITU Workshop on 5G Security
 - <https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20180319/Pages/default.aspx>
 - IMT-2020/5G Workshop and Demo Day 2018
 - Details forthcoming
 - Machine learning for a 5G future
 - <https://www.itu.int/en/ITU-T/academia/kaleidoscope/2018/Pages/default.aspx>

