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| **TSAG** |
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| **Title:** | List of collaboration mechanisms in ITU-T: FGs, JCAs, GSIs and IRGs (as of 2017-04-30) |
| **Purpose:** | Information |
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| **Keywords:** | ITU-T collaboration mechanisms |
| **Abstract:** | This document contains an update of TD 206r1/RevCom (2016-01) with the list of current and active ITU-T Focus Groups (FGs), Global Standards Initiatives (GSIs), Joint Coordination Activities (JCAs) and Intersector Rapporteur Groups (IRGs) as of 20 April 2017. The collaboration on ITS, the United for Smart Sustainable Cities (U4SSC) initiative and then ITU/WMO/UNESCO IOC Joint Task Force on SMART (Science Monitoring and Reliable Telecommunications) submarine cable system are also included in the list.This TD also provides a list of groups that have ceased their activities since the last TSAG, and detailed historical data on Focus Groups. The average duration of FGs is 23 months, as shown in Table A.1. |

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# Active Focus Groups (0)

Definition of Focus Group (from ITU-T Recommendation A.7):

*The objective of focus groups is to help advance the work of the ITU Telecommunication Standardization Sector (ITU-T) study groups and to encourage the participation of members of other standards organizations, including experts and individuals who may not be members of ITU. Focus group activities may include an analysis of gaps between current Recommendations and expected Recommendations, and provide material for consideration in the development of Recommendations.*

| Focus Group | Full name | Creation (Date/Body)  | Relevant SDO cooperation | Parent SG (if applicable) |
| --- | --- | --- | --- | --- |
| FG-DPM | Focus Group on Data Processing and Management to support IoT and Smart Cities & Communities | Established by SG20 at its meeting in Dubai 13-23 March 2017 | ISO, IEC, IEEE | SG20 |

# Active Global Standards Initiatives (0)

As of TSAG July 2016 and WTSA-16, the GSI mechanism has been discontinued.

# Active Joint Coordination Activities (7)

Definition of a Joint Coordination Activity (from ITU-T Recommendation A.1):

*A joint coordination activity (JCA) may be formed to coordinate work relating to more than one study group. Its primary role is to harmonize planned work effort in terms of subject matter, time-frames for meetings and publication goals*

| JCA | Full name | Creation (Date/Body)  | Relevant SDO Cooperation | Parent SG |
| --- | --- | --- | --- | --- |
| JCA-IMT2020 | Joint Coordination Activity on IMT2020 | Set up by SG13 in February 2017 per the instructions of Res 92. | See proposal in [TD 59/TSAG](https://www.itu.int/md/T17-TSAG-170501-TD-GEN-0059/en). | SG13 |
| [JCA-AHF](http://www.itu.int/ITU-T/jca/ahf/) | Joint Coordination Activity-Accessibility and Human factors | Established in December 2007.  |  | TSAG |
| [JCA-COP](http://www.itu.int/en/ITU-T/jca/COP/) | Joint Coordination Activity on Child Online Protection (JCA-COP) | Established by ITU-T SG 17 at its March 2012 meeting | IETF, ISO/IEC, W3C, OECD, EBU, and various NGOs | SG17 |
| [JCA-IdM](http://www.itu.int/ITU-T/jca/idm/) | Joint Coordination Activity for Identity Management | Established by TSAG in December 2007 | ISO/IEC, OASIS, ETSI, IETF, 3GPP, NIST, Kantara Initiative, ABA, OMA, ATIS, ENISA, ECLIPSE, OECD, UPU, TCG, GSMA, OIX, FIDIS, SSEDIC, STORK, … | SG17 |
| [JCA-IoT & SC&C](http://www.itu.int/en/ITU-T/jca/iot/) | Joint Coordination Activity on Internet of Things and Smart Cities and Communities | Established by ITU-T TSAG in 2006 as JCA-NID and renamed in February 2011 as JCA-IoT. In June 2015 TSAG assigned SG20 as parent SG for this JCA. Renamed in October 2015 as "JCA-IoT and SC&C" by SG20. | International organizations, Global Standards Initiative on Internet of Things (IoT-GSI), (WP1A; WP1B; WP5A), ISO (TC 122/104 JWG; TC 204), IEC, ISO/IEC JTC1 (SC6; SC31; WG7 on Sensor Networks), Regional and National Organizations, ARIB, CCSA, CEN, ETSI (TC M2M, 3GPP), GISFI, TIA, TTA, TTC, Global Standards Collaboration , M2M Standardization Task Force (MSTF), Forums, consortia, others , ECMA, GS1 / EPC Global, IETF, IERC, NFC, Open Geospatial Consortium (OGC), OMA, oneM2M, W3C, YRP Ubiquitous Networking Laboratory | SG20 |
| [JCA-MMeS](http://www.itu.int/en/ITU-T/jca/mmes/Pages/default.aspx) | Joint Coordination Activity on Multimedia aspects of e-services | Established in January 2017 | ISO, IEC | SG16 |
| [JCA-Res178](http://www.itu.int/en/ITU-T/jca/Res178/Pages/default.aspx) | Joint Coordination Activity on technical aspects of telecommunication networks to support the Internet (JCA-Res178) | Established in November 2012 by WTSA-12. TSAG agreed in June 2015 to keep the JCA-Res178 *dormant* until further contributions. | ISO, IEC JTC1, IETF, ETSI  | TSAG |
| [JCA-SDN](http://www.itu.int/en/ITU-T/jca/sdn/Pages/default.aspx) | Joint Coordination Activity on Software-Defined Networking | Established ITU-T TSAG in June 2013. In June 2015 TSAG assigned SG13 as parent SG for this JCA.  | ATIS SDN focus group, CCSA, ETSI ISG (NFV AFI), TIA, TTA, TTC, ONF, IETF (NVO3, I2RS, ALTO, SPRING), IRTF SDNRG, BBF SIMR, DMTF, MEF, 3GPP (SA2 and SA5), TMF, OMG SDN WG, IEEE NGSON, OpenDaylight, OpenStack neutron project | SG13 |

# Joint Collaboration Teams (1)

There is one joint collaboration team (JCT) currently in operation, on video coding, [JCT-VC](http://www.itu.int/en/ITU-T/studygroups/2013-2016/16/Pages/video/jctvc.aspx). This collaboration mechanism is based on ITU-T Recommendation A.23.

# Collaborations (3)

[Collaboration on ITS Communication Standards](http://www.itu.int/en/ITU-T/extcoop/cits/Pages/default.aspx) (CITS) is an experimental group, approved by TSAG, and has proven an effective mechanism for multi-lateral collaboration between SDOs. Mechanism described in A-Series Supplement 5.

The [United for Smart Sustainable Cities (U4SSC)](http://www.itu.int/en/ITU-T/ssc/united/Pages/default.aspx) initiative was launched by ITU and UNECE with the support of 14 other United Nations agencies in response to the **Sustainable Development Goal 11: "Make cities and human settlements inclusive, safe, resilient and sustainable".**

U4SSC primarily advocates for public policy to encourage the use of ICTs to facilitate and ease the transition to smart sustainable cities. The first U4SSC meeting was held in Geneva on 21-22 July 2016 at the ITU Headquarters and was attended by over 150 global smart city experts. The first phase of the U4SSC ended in April 2017 with the finalization of 24 output documents. Each of the output documents have been carefully mapped to the targets and objectives of the Sustainable Development Goals. These output documents will be launched together as a flipbook in May 2017.

Phase 2 of U4SSC was initiated during the second meeting of the U4SSC held on 5 April 2017 in Manizales, Colombia and attended by over 300 participants.  For this phase, five deliverables were announced along with the associated leaders:

* Data Taxonomy: Tomas Llorente: (SESIAD, Government of Spain)
* Guides on tools and mechanisms to finance SSC projects: Kari Aina Eik (Organization for International Economic Relations-OiER)
* Guidelines on strategies for circular cities – Okan Geray (Smart Dubai Office)
* Blockchained cities - Maria Luisa Marsal- (Intelligenter –International research think tank)
* City Science Application Framework – Okan Geray (Smart Dubai Office)

Each of these deliverables are assigned to a specific leader who is responsible for the overall quality and progress of the deliverable. A new management team consisting of two co-chairmen and two vice-chairmen along with the deliverable leaders were appointed during the second U4SSC meeting. Mr. Nasser Al Marzouqi (UAE) and Ms. Gloria Pacer (Spain) serve the Co-Chairmen of the U4SSC. The posts of the vice-chairmen are occupied by Dr Paolo Gemma (Huawei) and Ms. Victoria Sukenik (Argentina).

U4SSC has developed a comprehensive list of KPIs for smart sustainable cities through the Advisory Board for Smart Sustainable Cities. This Advisory Board consists of 16 UN agencies along with city representatives and smart city experts. Based on the inputs received from its stakeholders, the Advisory Board will create the world’s first Global Smart Sustainable City Index to be utilized by aspiring smart cities to monitor their transitions.

[ITU/WMO/UNESCO IOC Joint Task Force on SMART (Science Monitoring and Reliable Telecommunications) submarine cable system](http://www.itu.int/en/ITU-T/climatechange/task-force-sc/Pages/default.aspx) was established in September 2011 by the International Telecommunication Union (ITU), the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (UNESCO/IOC), and the World Meteorological Organization (WMO). This task force develops a strategy and roadmap to add climate and hazard monitoring sensors to repeaters on submarine telecommunication cables to create a global real-time ocean observation network. Workshops conducted in Rome (2011), Paris (2012), Madrid (2013), Singapore (2014) and Dubai (2016) as well as two NASA-funded workshops focused on climate and ocean circulation (2014 in Pasadena and 2015 in Honolulu) and another focused on tsunamis and earthquakes (2016 in Potsdam) have advanced this concept and identified the need for a “Wet Demonstrator” project as an essential element in the development and acceptance of telecommunications systems incorporating scientific sensors for environmental monitoring (Science Monitoring and Reliable Telecommunications - “SMART cable systems”). The Joint Task Force is now advancing to a Wet Demonstrator Project in partnership with industry and a research cabled ocean observatory. In order to identify qualified candidates to provide materials and services needed to realize the Wet Demonstrator project, an RFI (request for information) was sent to various organizations at the end of 2016. Twelve organizations responded by the end of April 2017.

# Intersector Rapporteur Groups (3)

Intersector rapporteur groups are covered by WTSA Resolution18.

| IRG | Full Name | Creation (Date/Body) | Relevant SDO Cooperation | Participating SGs |
| --- | --- | --- | --- | --- |
| [IRG-AVA](http://www.itu.int/en/irg/ava/Pages/default.aspx) | Intersector Rapporteur Group Audiovisual Media Accessibility | Established in 2013 | – | SG6 (R)SG9 (T)SG16 (T) |
| [IRG-AVQA](http://www.itu.int/en/irg/avqa/Pages/default.aspx) | Intersector Rapporteur Group Audiovisual Quality Assessment | Established in 2013 | – | SG6 (R)SG9 (T)SG12 (T) |
| [IRG-IBB](http://www.itu.int/en/irg/ibb/Pages/default.aspx) | Intersector Rapporteur Group on Integrated Broadcast-Broadband | Established in 2014 | – | SG6 (R)SG9 (T)SG16 (T) |

# Groups that have terminated their work since the last TSAG meeting (4)

| FG | Full Name | Creation (Date/Body) | Parent group |
| --- | --- | --- | --- |
| [FG IMT-2020](http://www.itu.int/en/ITU-T/focusgroups/imt-2020/Pages/default.aspx) | Focus Group on IMT-2020 | Established by ITU-T Study Group 13 in May 2015. Successfully concluded in December 2016. Formally closed at the SG13 meeting (February 2017). | SG13 |
| [FG DFS](http://www.itu.int/en/ITU-T/focusgroups/dfs/Pages/default.aspx) | ITU-T Focus Group Digital Financial Services (FG DFS) | Established by TSAG in June 2014. Successfully concluded in December 2016.  | TSAG |
| [JCA-CIT](http://www.itu.int/ITU-T/jca/cit/) | Joint Coordination Activity on Conformance and Interoperability Testing | Established in 2007 by SG17. In November 2012 WTSA-12 assigned SG11 as parent SG for this JCA. Closed in June 2016. | SG11 |
| [JCA-IPTV](http://www.itu.int/en/ITU-T/jca/iptv) | Joint Coordination Activity on IPTV | Established in December 2007, closed in November 2016. | SG16 |

Annex A – Detailed historical information on ITU-T Focus Groups

Structure of this Annex:

* Table A.1 – Focus Group minimum, maximum and average duration
* Table A.2 – Currently active focus groups
* Table A.3 – Focus groups that have concluded their activities: January 1998 to December 2017
* Table A.4 – Focus Groups by year 1998-2017

Abbreviations legend:

|  |  |  |  |
| --- | --- | --- | --- |
| D Deliverable | R Report | TR Technical Report | TS Technical Specification |

Table A.1 – Focus Group minimum, maximum and average duration



Table A.2 – Currently active focus groups

| Name | Parentgroup | Established | Duration(so far) | FG output | FG impact |
| --- | --- | --- | --- | --- | --- |
| Focus Group on Data Processing and Management to support IoT and Smart Cities & Communities | SG20 | 2017-03 |  |  | Taking into account the data interoperability, classification, format and security issues that the affects various stakeholders, this new Focus Group would play a pivotal role in providing a platform to share views, to develop a series of deliverables, and showcase initiatives, projects, and standards activities linked to data processing and management as well as the establishment of IoT ecosystem solutions for data focused cities. This [FG-DPM](https://www.itu.int/en/ITU-T/focusgroups/dpm/Pages/default.aspx) promotes the establishment of data management frameworks and invites non ITU-T members to contribute to its work.The Terms of Reference (ToR) of the ITU-T Focus Group on "Data Processing and Management to support IoT and Smart Cities & Communities" (FG-DPM) can be found [here](https://www.itu.int/en/ITU-T/focusgroups/dpm/Documents/FGDPM_ToRs.docx). |

Table A.3 – Focus groups that have concluded their activities: 1998-01 to 2017-02 (29 in total)

| Name | Parentgroup | Established/terminated[[1]](#footnote-1) | Duration (months) | FG output | FG impact[[2]](#footnote-2) |
| --- | --- | --- | --- | --- | --- |
| [ITU-T Focus Group Digital Financial Services (FG DFS)](http://www.itu.int/en/ITU-T/focusgroups/dfs/Pages/default.aspx) | TSAG | 2014-06/2016-12 | 24 | FG-DFS produced 29 Technical Reports. The first 23 are already published:* [The Digital Financial Services Ecosystem](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/09_2016/FINAL%20ENDORSED%20ITU%20DFS%20Introduction%20Ecosystem%2028%20April%202016_formatted%20AM.pdf)
* [Regulation in the Digital Financial Services Ecosystem](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/09_2016/Regulation%20and%20the%20DFS%20Ecosystem.pdf)
* [Review of National Identity Programs](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/09_2016/Review%20of%20National%20Identity%20Programs.pdf)
* [Enabling Merchant Payments Acceptance in the Digital Financial Ecosystems](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/09_2016/FINAL%20ENDORSED%20Enabling%20Merchant%20Payments%20Acceptance%2030%20May%202016_formatted%20AM.pdf)
* [Merchant Data and Lending](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/10_2016/ITUFGDFS_REPORT_ON_Merchant%20Data_And_Lending-10-2016_final.pdf)
* [Impact of Agricultural Value Chains on Digital Liquidity](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/10_2016/10.Impact_of_Agricultural_Value_Chains_on_Digital_Liquidity.pdf)
* [Impact of social networks on digital liquidity](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/10_2016/ITUFGDFS_REPORT-ON-Impact-of-Social-Networks-on-Digital-Liquidity-11-2016.pdf)
* [The Role of Postal Networks in Digital Financial Services](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/10_2016/The%20Role%20of%20Postal%20Networks%20in%20Digital%20Financial%20Services_Formatted.pdf)
* [B2B and the DFS Ecosystem](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/10_2016/ITUFGDFS_REPORT%20ON%20B2BandDFSEcosystem-11-2016.pdf)
* [Bulk Payments and the DFS Ecosystem](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/10_2016/ITUFGDFS_REPORT%20ON%20Bulk%20Payments_11-2016.pdf)
* [Over the counter transactions: A threat to or a facilitator for digital finance ecosystems?](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/12_2016/ITUFGDFS_REPORT%20ON%20OTC%20_11-2016.pdf)
* [DFS Glossary](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/201701/ITU_FGDFS_DFS-Glossary.pdf)
* [Cooperation frameworks between Authorities, Users and Providers for the development of the National Payments System](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/09_2016/Cooperation%20frameworks%20between%20Authorities%2C%20Users%20and%20Providers%20for%20the%20development%20of%20the%20National%20Payments%20System.pdf)
* [Payment System Oversight and Interoperability](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/10_2016/ITUFGDFS_REPORT%20ON%20Payment%20System%20Oversight%20and%20Interoperability.pdf)
* [Payment System Interoperability and Oversight: The International Dimension](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/10_2016/ITUFGDFS_REPORT%20ON%20Payment%20System%20InteroperabilityandOversightThe%20InternationalDimension-11-2016.pdf)
* [Access to payment infrastructures](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/09_2016/Access%20to%20Payment%20Infrastructures.pdf)
* [The Regulator's Perspective on the Right Timing for Inducing Interoperability](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/201702/ITU_FGDFS_Report-Right-Timing-for-Inducing-Interoperability.pdf)
* [Commonly identified Consumer Protection themes for Digital Financial Services](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/09_2016/ConsumerProtectionThemesForBestPractices.pdf)
* [QoS and QoE Aspects of Digital Financial Services](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/09_2016/FGDFSQoSReport.pdf)
* [Review of DFS User Agreements in Africa: A Consumer Protection Perspective](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/01_2017/ITU_FGDFS_Report-on-Review-of-DFS-User-Agreements-in-Africa.pdf)
* [Security Aspects of Digital Financial Services (DFS)](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Documents/ITU_FGDFS_SecurityReport.pdf)
* [Identity and Authentication](http://www.itu.int/en/ITU-T/studygroups/2017-2020/09/Documents/ITU_FGDFS_Report_IdentityandAuthentication.pdf)
* [DFS Vendor Platform Features](http://www.itu.int/en/ITU-T/focusgroups/dfs/Documents/201702/ITU_FGDFS_Report-DFSVendorPlatform.pdf)

The following remaining deliverables will be ready by first week of March 2017:* Competition issues in DFS
* Distributed ledger technologies and financial inclusion
* Mobile Handset Features for DFS
* Emerging Technology Trends and Innovation in DFS
* FG DFS recommendations
* Executive Summary of FG DFS
 | * Outputs of FG DFS will be considered in the next phase of DFS for implementation at country level. LS sent to TSAG (1-4 May 2017) with suggested allocation of subsequent work to the various ITU-T SGs.
* Workshop on Digital Financial Services is planned on 19 April 2017 in Washington D.C to disseminate findings of the Focus Group to DFS stakeholders
* New WTSA Resolution 89 (Hammamet 2016) on Using ICTs to bridge the financial inclusion gap
* Work of FG DFS resulted in discussion in SG12 to consider QoS work on DFS
* Work of FG DFS was discussed with SG3 Mobile Financial Services Rapporteur Group for new Recommendation on cost for DFS
* FG DFS has attracted participation from payment organizations and international organizations which are active in financial inclusion
* New work started in SG16 on distributed ledger services (ITU-T F.DLS).
 |
| [Focus Group on IMT-2020 (FG IMT-2020)](http://www.itu.int/en/ITU-T/focusgroups/imt-2020/Pages/default.aspx) | SG13 | 2015-05/2016-12 | 19 | Output 2015-12:* [Standards Gap Analysis document](http://www.itu.int/md/T13-SG13-151130-TD-PLEN-0208/en)

Outputs 2016-12:* Draft Terms and definitions for IMT-2020 in ITU-T
* Draft Technical Report: Application of network softwarization to IMT-2020
* Draft Recommendation: Requirements of IMT-2020 from network perspective
* Draft Recommendation: Framework for IMT-2020 network architecture
* Draft Recommendation: Requirements of IMT-2020 fixed mobile convergence
* Draft Technical Report: Unified network integrated cloud for fixed mobile convergence
* Draft Recommendation: IMT-2020 network management requirements
* Draft Recommendation: Network management framework for IMT-2020
* Draft Technical Report: Application of information centric networking to IMT-2020

The nine 2016 Deliverables and the Chairman's Report are compiled in this [ZIP-file](http://www.itu.int/en/ITU-T/focusgroups/imt-2020/Documents/FG_IMT-2020_Deliverables_2016.zip). | * Work of the Focus Group provides the foundations of a new SG13 Working Party on IMT-2020, the Questions reporting to this working party, and their various work items
* Standards Gap Analysis fuelled activities in SG13, SG12, SG11, SG15
* [FG IMT-2020 Workshop and Demo Day: Wireline Technology Enablers for 5G](http://www.itu.int/en/ITU-T/Workshops-and-Seminars/201612/Pages/default.aspx)
* New WTSA [Resolution 92](http://www.itu.int/pub/T-RES-T.92-2016) (Hammamet, 2016): Enhancing the standardization activities in the ITU Telecommunication Standardization Sector related to non-radio aspects of international mobile telecommunications
 |
| [Focus Group on Smart Water Management (FG SWM)](http://www.itu.int/en/ITU-T/focusgroups/swm/Pages/default.aspx) | SG5 | 2013-06/2015-03 | 21 | * [The Role of ICT in Water Resource Management](https://www.itu.int/ifa/t/fg/swm/docs/Draft_Deliverables/fg-swm-o-0007-The%20Role%20of%20ICT%20in%20Water%20Resource%20Management.docx)
* [Smart Water Management Stakeholders Map](https://www.itu.int/ifa/t/fg/swm/docs/Draft_Deliverables/fg-swm-i-0079-contribution_from_UNESCO_Stakeholder_List.zip)
* [Smart water management project classification](https://www.itu.int/ifa/t/fg/swm/docs/Draft_Deliverables/fg-swm-i-0080-contribution_from_UNESCO_Project_Classifications.zip)
* [Smart water management stakeholder challenges and mitigation](https://www.itu.int/ifa/t/fg/swm/docs/Draft_Deliverables/fg-swm-i-0081-contribution_from_UNESCO_Stakeholder_Challenges_and_Mitigation.zip)
* [TR on the KPI to assess the impact of the use of ICT in SWM](https://www.itu.int/ifa/t/fg/swm/docs/Draft_Deliverables/fg-swm-i-0037-r2-KPIs-Feb20.doc)
 | Output from FG SWM was submitted to Q15/5 in ITU-T SG5. |
| [Focus Group on Aviation Applications of Cloud Computing for Flight Data Monitoring (FG AC)](http://www.itu.int/en/ITU-T/focusgroups/ac/Pages/default.aspx) | TSAG | 2014-06/2015-12 | 18(13 months from 1st meeting to deliverable submission to TSAG) | * Submitted its four final deliverables for consideration of TSAG in February 2016 (see [TD 385/TSAG](http://www.itu.int/md/T13-TSAG-160201-TD-GEN-0385/en)).
 | * Work item on e-quarantine started in SG16 under Q28/16 (e-health)
* TSAG to consider FG proposals to assign FG output to SG13, 16 and 17 for further work
* Work of FG valued in and outside ITU and with positive impact on Global Flight Tracking outcome of WRC-15.
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| [Focus Group on Smart and Sustainable Cities (FG SSC)](http://www.itu.int/en/ITU-T/focusgroups/ssc/Pages/default.aspx) | SG5 | 2013-02/2015-05 | 27 | * [TR on "An overview of smart sustainable cities and the role of information and communication technologies"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Approved_Deliverables/TR-Overview-SSC.docx) [[Spanish](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Approved_Deliverables/TR-Overview-SSC-espanol.docx)]
* [TR on "Smart sustainable cities: an analysis of definitions"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Approved_Deliverables/TR-Definitions.docx) [[Spanish](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Approved_Deliverables/TR-Definitions-espanol.docx)]
* [TR on "Key performance indicators definitions for smart sustainable cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0270-r3-KPIs_definitions.docx)
* [TS on "Overview of key performance indicators in smart sustainable cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Approved_Deliverables/TS-Overview-KPI.docx) [[Chinese](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Approved_Deliverables/TS-Overview-KPI-chinese.docx)] [[Spanish](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Approved_Deliverables/TS-Overview-KPI-espanol.docx)]
* [TS on "Key performance indicators related to the use of information and communication technology in smart sustainable cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0268-r5-KPIs_ICT.docx)
* [TS on "Key performance indicators related to the sustainability impacts of information and communication technology in smart sustainable cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0269-r4-KPIs_impact.docx)
* [TR on "Electromagnetic field (EMF) considerations in smart sustainable cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Approved_Deliverables/TR-EMF.docx)
* [TR on "Smart water management in cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Approved_Deliverables/TR-SWM-cities.docx)
* [TR on "Information and communication technologies for climate change adaptation in cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0107-r7-ICTs-for-climate-change-adaptation.docx)
* [TR on "Cybersecurity, data protection and cyber resilience in smart sustainable cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0090-r7-technical_report_on_ICT_infrastructure_for_resilience_security.doc)
* [TR on "Integrated management for smart sustainable cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0210-r5-technical_report_integrated_management_for_ssc.doc)
* [TR on "Standardization roadmap for smart sustainable cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0274-r3-technical_report_standardization_roadmap.doc)
* [TR on "Setting the stage for stakeholders’ engagement in smart sustainable cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0113-r9-SSC-stakeholders.docx)
* [TR on "Master plan for smart sustainable cities"](http://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0314-r5-ssc_framework.docx)
* [TR on "Smart sustainable cities: a guide for city leaders"](https://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0315-r5-city_leaders_guide.docx)
* [TR on "Overview of smart sustainable cities infrastructure"](https://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0097-r8-Technical_Report_on_Smart_Sustainable_Cities_Infrastructure.docx)
* [TS on "Setting the framework for an ICT architecture of a smart sustainable city"](https://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0345-r5-ssc_architecture.docx)
* [TS on "Multi-service infrastructure for smart sustainable cities in new-development areas"](https://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0347-r5-Multi-service-infrastructure-for-SSC-in-new-development-areas.docx)
* [TR on "Intelligent sustainable buildings for smart sustainable cities"](https://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0136-r6-smart-buildings.docx)
* [TR on "Anonymization infrastructure and open data in smart sustainable cities"](https://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0234-r9-technical_report_anonymization_infrastructure_open_data_in_ssc.docx)
* [TR on "Standardization activities for smart sustainable cities"](https://www.itu.int/en/ITU-T/focusgroups/ssc/Documents/Finalized_Deliverables/fg-ssc-0275-r5-technical-report-standardization-activities.doc)
 | * Creation of a new Study Group 20 on IoT and smart cities and communities in June 2015.
* 6 TRs have been converted into 6 Supplements.
* 2 TSs have provided the basis for the development of two Draft Recommendations.
* 4 TRs have been submitted to SG20 and are expected to provide the basis for four new ITU-T Supplements.
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| [Focus Group on Bridging the Gap: From Innovation to Standards](http://www.itu.int/en/ITU-T/focusgroups/innovation/Pages/default.aspx) | TSAG | 2012-01/2015-06 | 41 | * [Deliverable 1: Successful cases of ICT innovations for developing countries](http://www.itu.int/en/ITU-T/focusgroups/innovation/Documents/Deliverable%201%20-%20Successful%20cases%20of%20ICT%20innovations%20for%20developing%20countries%20.pdf)
* [Deliverable 2: New Standardization Activities for ITU-T Study Groups](http://www.itu.int/en/ITU-T/focusgroups/innovation/Documents/Deliverable%202%20-%20New%20Standardization%20Activities%20for%20ITU-T%20Study%20Groups%20and%20ICT%20Innovation%20Panel.pdf)
 | Outputs from FG Innovation were transferred in 2015 to SG16 and SG17. A decision is awaited from TSAG on the recommendation for the establishment of the ICT Innovation Strategy Group under TSAG. |
| [Focus Group on Disaster Relief Systems, Network Resilience and Recovery (FG DR&NRR)](http://www.itu.int/en/ITU-T/focusgroups/drnrr/) | SG2 | 2012-01/2014-06 | 29 | * [TR on Telecommunications and Disaster Mitigation](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DRNRR-2013)
* [TR: Overview of Disaster Relief Systems, Network Resilience and Recovery](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DRNRR-2014)
* [TR: Promising technologies and use cases - Part I, II and III](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DRNRR-2014-1)
* [TR: Promising technologies and use cases - Part IV and V](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DRNRR-2014-2)
* [TR: Gap Analysis of Disaster Relief Systems, Network Resilience and Recovery](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DRNRR-2014-3)
* [TR: Terms and definitions for disaster relief systems, network resilience and recovery](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DRNRR-2014-4)
* [TR: Requirements for Disaster Relief System](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DRNRR-2014-5)
* [TR: Requirements for network resilience and recovery](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DRNRR-2014-6)
* [TR: Requirements on the improvement of network resilience and recovery with movable and deployable ICT resource units](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DRNRR-2014-7)
* [Two base documents: “Recommendation on requirement for Disaster Message Board Service” and “Recommendation on requirement for Disaster Voice Delivery Service”](http://www.itu.int/md/T13-SG02-130917-TD-GEN-0148/en)
 | Outputs transferred to SG2 and SG15 for further development as three new drafts in SG2 and as two new drafts in SG15:* ITU-T E.108 (ex E.rdr-mms) (determined) (Requirement for a Disaster Relief Mobile Message Service), Q3/2.
* ITU-T E.RDR (Requirements for Disaster Relief Systems), Q3/2.
* ITU-T E.TD-DR (Terms and definitions for DR&NRR), Q3/2. ITU-T L.nrr-frm (Framework of disaster management for network resilience and recovery), Q17/15.
* ITU-T L.dm-nrr-mdru (Disaster management for improving network resilience and recovery with movable and deployable ICT resource units), Q17/15.
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| [Focus Group on Machine-to-Machine Service Layer (FG M2M)](http://www.itu.int/en/ITU-T/focusgroups/m2m/) | SG11 | 2012-01/2013-12 | 23 | [D0.1: M2M standardization activities and gap analysis: e-health](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-M2M-2014-D0.1)[D0.2: M2M enabled ecosystems: e-health](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-M2M-2014-D0.2)[D1.1: M2M use cases: e-health](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-M2M-2014-D1.1)[D2.1: M2M service layer: Requirements and architectural framework](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-M2M-2014-D2.1)[D3.1: M2M service layer: APIs and protocols overview](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-M2M-2014-D3.1) | Deliverables used as basis for two work items:* ITU-T F.748.5 (ex F.M2M-RA) in SG16, based on D2.1
* Q.3052 (ex Q.M2M\_pro\_overview) in SG11, based on D3.1

Other deliverables considered by ITU-T SGs 11, 13 and 16. |
| [Focus Group on Smart Cable Television (FG SmartCable)](http://www.itu.int/en/ITU-T/focusgroups/smartcable/Pages/default.aspx) | SG9 | 2012-06/2013-12 | 18 | [TR on Smart Cable Television](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-SMART-2013) | Sections of the TR were included in draft Recommendations under SG9 |
| [Focus Group on Driver Distraction (FG Distraction)](http://www.itu.int/en/ITU-T/focusgroups/distraction/Pages/default.aspx) | SG12 | 2011-02/2013-03 | 25 | [R: Situational Awareness Management](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DISTRACTION-2013-1)[R: Use Cases](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DISTRACTION-2013-2)[R: User Interface Requirements for Automotive Applications](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DISTRACTION-2013-3)[R: Vehicle-to-Applications Communications Interface](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DISTRACTION-2013-4)[Final Report](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-DISTRACTION-2013-5) | Provided structure and initial content for draft ITU-T Recommendations: three new work items started in SG16 (G.SAM, G.V2A), and SG12 (P.UIA) |
| [Focus Group on Cloud Computing (FG Cloud)](http://www.itu.int/en/ITU-T/focusgroups/cloud/Pages/default.aspx) | TSAG | 2010-02/2011-12 | 22 | [TR: Part 1: Introduction to the cloud ecosystem: definitions, taxonomies, use cases and high-level requirements](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-CLOUD-2012-P1)[TR: Part 2: Functional requirements and reference architecture](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-CLOUD-2012-P2)[TR: Part 3: Requirements and framework architecture of cloud infrastructure](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-CLOUD-2012-P3)[TR: Part 4: Cloud Resource Management Gap Analysis](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-CLOUD-2012-P4)[TR: Part 5: Cloud security](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-CLOUD-2012-P5)[TR: Part 6: Overview of SDOs involved in cloud computing](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-CLOUD-2012-P6)[TR: Part 7: Cloud computing benefits from telecommunication and ICT perspectives](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-CLOUD-2012-P7) | New dedicated WP6/13 focused on framework for Cloud Computing studies in SG13.Three new Questions on Cloud Computing;JCA-Cloud (January 2012) by TSAG;Three new Recs in SG13: Recs [Y.3503](http://www.itu.int/rec/T-REC-Y.3503), [Y.3510](http://www.itu.int/rec/T-REC-Y.3510) and [Y.3520](http://www.itu.int/rec/T-REC-Y.3520)One new Rec. by SG17: [ITU-T X.1601: Security framework for cloud computing](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=12036)TSAG (February 2011 meeting) did not endorse the new Question 23/13 on cloud computing (CC) in SG13. Issue was suspended until FG finishes its work in order not to duplicate the work.SAP joined ITU‑T and Microsoft increased participation because of FG Cloud. |
| [[Focus Group on Smart Grid (FG Smart)](http://www.itu.int/en/ITU-T/focusgroups/smart/Pages/Default.aspx)](http://www.itu.int/en/ITU-T/focusgroups/smart/Pages/Default.aspx) | TSAG | 2010-02/2011-12 | 22 | D: [Use Cases for Smart Grid](http://www.itu.int/en/ITU-T/focusgroups/smart/Documents/smart-o-0031r7-use%20case_output.doc)D: [Requirements of communication for Smart Grid](http://www.itu.int/en/ITU-T/focusgroups/smart/Documents/smart-o-0032r6-requirement_deliverable.zip)D: [Smart Grid Architecture](http://www.itu.int/en/ITU-T/focusgroups/smart/Documents/smart-o-0033r6_architecture_deliverable.doc)D: [Smart Grid Overview](http://www.itu.int/en/ITU-T/focusgroups/smart/Documents/smart-o-0034r4-overview-output.doc)D: [Terminology](http://www.itu.int/en/ITU-T/focusgroups/smart/Documents/smart-o-0030r6-terminology_deliv.doc) | Input to SG15 PLC Recommendations (G.990x series under Q15/15) and new work items in SG17:ITU-T X.sgsec-1, Security functional architecture for smart grid services using telecommunication networkITU-T X.segsec-2, Security guidelines for home area network devices in smart grid systemsEDF joined ITU-T because of FG Smart. |
| [Focus Group on Audiovisual Media Accessibility (FG AVA)](http://www.itu.int/en/ITU-T/focusgroups/ava/Pages/default.aspx) | SG16 | 2009-11/2013-10 | 47 | [TR: Part 1: Overview of audiovisual media accessibility: An introduction](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P1)[TR: Part 2: Vocabulary for ITU-T Focus Group on Audiovisual Media Accessibility (FG AVA)](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P2)[TR: Part 3: Using audiovisual media - A taxonomy of participation](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P3)[TR: Part 4: R: activities: Working Group A "Captioning"](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P4)[TR: Part 5: R: activities: Working Group B "Audio/Video description and spoken captions"](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P5)[TR: Part 6: R: activities: Working Group C "Visual signing and sign language"](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P6)[TR: Part 7: R: activities: Working Group C "Visual signing and sign language" and D "Emerging access services" on common topics](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P7)[TR: Part 8: R: activities of Working Group F "Participation and digital media"](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P8)[TR: Part 9: Requirements and good practice for supporting remote participation in meetings for all](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P9)[TR: Part 10: Draft recommended requirements of TV receiver for closed signing](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P10)[TR: Part 11: Draft recommended production guidelines for sign language service](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P11)[TR: Part 12: Methods for improving the intelligibility of audio](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P12)[TR: Part 13: Audio characteristics for audio descriptions and/or spoken subtitles](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P13)[TR: Part 14: Draft recommended requirements for the application of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) for media services for all](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P14)[TR: Part 15: Draft recommended accessibility features for mobile media devices](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P15)[TR: Part 16: Interworking and digital audiovisual media accessibility](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P16)[TR: Part 18: R: Working Group G "Digital broadcast television"](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-AVA-2013-P18) | Eight deliverables converted as or incorporated into SG16 work items in October 2013 and are being worked out based on further inputs, for technical completeness. One or two WIs are expected for Consent or Approval at the SG16 meeting in Feb 2015.FG AVA included participation from ITU-R experts and upon its closing, IRG-AVA was created (ITU-R SG6, ITU-T SG9 and SG16) to continue the inter-sector technical collaboration. |
| [Focus Group on Car Communication (FG CarCOM)](http://www.itu.int/en/ITU-T/focusgroups/carcom/Pages/default.aspx) | SG12 | 2009-11/2013-03 | 40 | [TR: FG CarCom](http://www.itu.int/en/ITU-T/focusgroups/carcom/Documents/Technical_report.pdf) Final Report | P.1130 (ex P.VSSR) (Subsystem requirements for automotive speech services (SG12, Q4/12)SG12, Q4/12, revised ITU-T P.1100 and P.1110. |
| [Focus Group on Future Networks (FG FN)](http://www.itu.int/en/ITU-T/focusgroups/fn/Pages/Default.aspx) | SG13 | 2009-01/2010-12 | 23 | [Future Networks: Objectives and Design Goals](http://www.itu.int/oth/T3A05000072/en)[Framework of network virtualization for Future Networks](http://www.itu.int/oth/T3A05000074/en)[Overview of Energy-saving of Networks](http://www.itu.int/oth/T3A05000074/en)[Identifiers and Identification processes in Future Networks](http://www.itu.int/oth/T3A05000039/en)[Terminology of Future Networks](http://www.itu.int/oth/T3A05000075/en)[Project descriptions](http://www.itu.int/oth/T3A05000076/en) | [Y.3001](http://www.itu.int/rec/T-REC-Y.3001) based on the main deliverable of the FG FN was approved by SG13 in May 2011 (within 5 month of FG closure).All 6 deliverables of the FG FN were turned into TDs/SG13 and served basis for ITU-T [Y.3011](http://www.itu.int/rec/T-REC-Y.3011), [Y.3021](http://www.itu.int/rec/T-REC-Y.3021), [Y.3031](http://www.itu.int/rec/T-REC-Y.3031) and WIs on SG13 work programme. |
| [Focus Group on ICTs and Climate Change (FG ICT&CC)](http://www.itu.int/ITU-T/focusgroups/climate/index.html) | TSAG | 2008-07/2009-04 | 9 | [Chairman's Report](http://www.itu.int/oth/T3307000001/en)[Executive Summary](http://www.itu.int/oth/T3307000002/en)[D1: Definitions](http://www.itu.int/oth/T3307000003/en)[D2: Gap Analysis and Standards Roadmap](http://www.itu.int/oth/T3307000004/en)[D3: Methodologies](http://www.itu.int/oth/T3307000005/en)[D4: Direct and Indirect Impact of ITU Standards](http://www.itu.int/oth/T3307000006/en) | Mandate of SG5 was updated and WP3/5 on ICT &CC was created at the TSAG meeting in April 2009. Several Recommendations were approved as a result of the work of FG ICT&CC including ITU-T L.1400, L.1410, L.1420, L.1430 and L.1440 (approved in October 2015).  |
| [Focus Group "From/In/To Cars Communication II (FG CarCom)"](http://www.itu.int/ITU-T/studygroups/com12/fgcarcom/index.html) | SG12 | 2008-05/2009-11 | 18 | [TS: Wideband Hands-Free Communication in Motor Vehicles](http://www.itu.int/md/T09-FG.CARCOM-C-0026/en) | Basis of ITU-T [P.1110](http://www.itu.int/rec/T-REC-P.1110). |
| [Focus Group on Identity Management (FG IdM)](http://www.itu.int/ITU-T/studygroups/com17/fgidm/index.html) | SG17 | 2006-12/2007-09 | 10 | [R: Activities Completed and Proposed](http://ifa.itu.int/t/sftp/fgidm/Deliverables/0292-att-1.doc)[R: the Deliverables](http://ifa.itu.int/t/sftp/fgidm/Deliverables/0293-att-1.doc)[R: Identity Management Ecosystem and Lexicon](http://ifa.itu.int/t/sftp/fgidm/Deliverables/0294-att-1.doc)[R: Identity Management Use Cases and Gap Analysis](http://ifa.itu.int/t/sftp/fgidm/Deliverables/0295-att-1.doc)[R: Requirements for Global Interoperable Identity Management](http://ifa.itu.int/t/sftp/fgidm/Deliverables/0296-att-1.doc)[R: Identity Management Framework for Global Interoperability](http://ifa.itu.int/t/sftp/fgidm/Deliverables/0297-att-1.doc)SG17 Tutorials on outcome of FG-IdM:[Identity Management Overview](http://www.itu.int/dms_pub/itu-t/oth/15/04/T15040000010001PDFE.pdf), Anthony Nadalin, ITU‑T Focus Group on Identity Management[Identity Management Framework](http://www.itu.int/dms_pub/itu-t/oth/15/04/T15040000020001PDFE.pdf), Anthony Nadalin, ITU-T Focus Group on Identity Management[ITU-T FG IdM Tutorial Presentation part II,](http://www.itu.int/dms_pub/itu-t/oth/15/04/T15040000030001PDFE.pdf) Ray P. Singh, ITU-T Focus Group on Identity Management[Identity Management Use Case & Gap Analysis](http://www.itu.int/dms_pub/itu-t/oth/15/04/T15040000040001PDFE.pdf), Ray P. Singh, ITU-T Focus Group on Identity Management[Identity Management Ecosystem & Lexicon Report](http://www.itu.int/dms_pub/itu-t/oth/15/04/T15040000050001PDFE.pdf), Mike Hird, ITU-T Focus Group on Identity Management[Identity Management Requirements Report](http://www.itu.int/dms_pub/itu-t/oth/15/04/T15040000060001PDFE.pdf), Anthony Rutkowski, ITU-T Focus Group on Identity Management. | Eleven Recs and one supplement in SG17:[ITU-T X.1250: Baseline capabilities for enhanced global identity management and interoperability](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=9456)[ITU-T X.1251: A framework for user control of digital identity](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=9619)[ITU-T X.1252: Baseline identity management terms and definitions](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=10440)[ITU-T X.1253: Security guidelines for identity management systems](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=11343)[ITU-T X.1254: Entity authentication assurance framework](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=11608)[ITU-T X.1255: Framework for discovery of identity management information](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=11951)[ITU-T X.1275: Guidelines on protection of personally identifiable information in the application of RFID technology](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=10441)[X Suppl. 7: ITU-T X.1250 series – Supplement on overview of identity management in the context of cybersecurity](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=7356)[ITU-T Y.2720: NGN identity management framework](http://www.itu.int/rec/T-REC-Y.2720-200901-I)[ITU-T Y.2721: NGN identity management requirements and use cases](http://www.itu.int/rec/T-REC-Y.2721-201009-I)[ITU-T Y.2722: NGN identity management mechanisms](http://www.itu.int/rec/T-REC-Y.2722-201101-I)KISA, CNRI, GMSA and Bank of America joined ITU-T after the closure of this FG. CNRI joined ITU-T because of FG-IdM |
| [Focus Group "From/In/To Cars Communication"](http://www.itu.int/ITU-T/studygroups/com12/fgfit/index.html) | SG12 | 2006-06/2008-01 | 19 | [TS: Hands-Free Communication in Motor Vehicles](http://www.itu.int/md/T05-FG.FITCAR-DOC-0005/en) | Basis of ITU-T P.1100. |
| [IPTV Focus Group](http://www.itu.int/en/ITU-T/focusgroups/iptv/Pages/default.aspx) | SG13 | 2006-04/2008-01 | 21 | [2008 – Proceedings](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-IPTV-2008-1) | Starting point for the work in SGs 13, 16 and 17:[ITU-T X.1191: Functional requirements and architecture for IPTV security aspects](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=9627)[Y.1901](http://www.itu.int/rec/T-REC-Y.1901), [Y.1910](http://www.itu.int/rec/T-REC-Y.1910), [Y.1991](http://www.itu.int/rec/T-REC-Y.1991) are using material from IPTV FG; the concept for developing ITU-T [Y.1903](http://www.itu.int/rec/T-REC-Y.1903), [Y.2012](http://www.itu.int/rec/T-REC-Y.2012), [Y.2017](http://www.itu.int/rec/T-REC-Y.2017) and [Y.2019](http://www.itu.int/rec/T-REC-Y.2019) were inspired by the results achieved by IPTV FG.Seeded the H.700 series Recommendations, basis for Technical Paper HSTP-MCTA on media codecs for IPTV. |
| [Security Baseline for Network Operators Focus Group](http://www.itu.int/ITU-T/studygroups/com17/sbno/index.html) | SG17 | 2005-10/2007-09 | 23 | [COM 17 – TD 0289](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=T05-SG17-070919-TD-PLEN-0289) (FG SBNO Report),[COM 17 – TD 0281](http://www.itu.int/md/meetingdoc.asp?lang=en&parent=T05-SG17-070919-TD-PLEN-0281) (draft X.sbno) | [Supplement 2 to X-Series Recommendations - ITU-T X.800-X.849: Supplement on security baseline for network operators](http://www.itu.int/rec/T-REC-X.Sup2/en) |
| [Telecommunication Management Collaboration – Multi-Technology Network Management (MTNM) Focus Group](http://www.itu.int/ITU-T/studygroups/com04/tmc/mtnm/index.html) | SG4/TMF | 2005-02/2006-06 | 16 | Reports to ITU-T SG4 | Helped coordination of standardization work between ITU‑T SG4 and TMF. |
| [NGN Management Focus Group](http://www.itu.int/ITU-T/studygroups/com04/ngn-mfg/index.html) | SG4 | 2004-09/2008-05 | 44 | [NGN Management Specification Roadmap](http://www.itu.int/ITU-T/studygroups/com04/roadmap.html) | Led to creation of [JCA-MGT](http://www.itu.int/en/ITU-T/jca/mgt/Pages/default.aspx) (2008‑2011). |
| [Open Communications Architecture Forum (OCAF) Focus Group](http://www.itu.int/ITU-T/ocaf/index.html) | SG13 | 2004-05/2008-01 | 44 | [Carrier Grade Open Environment Reference Model](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-OCAF-2005-CGOERM) | FG deliverable used in the development of ITU-T [Y.2901](http://www.itu.int/rec/T-REC-Y.2901) and [Y.2902](http://www.itu.int/rec/T-REC-Y.2902). |
| [Focus Group on Next Generation Networks (FGNGN)](http://www.itu.int/ITU-T/ngn/fgngn/index.html) | SG13 | 2004-05/2005-12 | 19 | Blue book – ITU-T NGN FG proceedings ([Part 1](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-PROC-FGNGN-2005-P1) and  [Part 2](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-PROC-FGNGN-2005-P2)) | Thirty deliverables were distributed to ITU-T SGs.NGNFG deliverables formed the basis for NGN Release 1 and many ITU-T Y.2000-series Recommendations (ITU-T [Y.2111](http://web.itu.int/rec/T-REC-Y.2111), [Y.2112](http://web.itu.int/rec/T-REC-Y.2112), [Y.2113](http://web.itu.int/rec/T-REC-Y.2113), [Y.2173](http://web.itu.int/rec/T-REC-Y.2173), [Y.2174](http://web.itu.int/rec/T-REC-Y.2174) and [Y.2175](http://web.itu.int/rec/T-REC-Y.2175) and others).The work on NGN further started in SGs 4, 11, 12, 13, 15, 16, 17 and 19 inspired by the NGN FG progress.Led to creation of the GSI concept immediately implemented as NGN GSI that was in operation from 2006 to 2012. |
| [Telecom Management Collaboration - for Human Machine Interface (HMI) Focus Group](http://www.itu.int/ITU-T/studygroups/com04/tmc/hmi/index.html) | SG4/TMF | 2004-05/2005-02 | 9 | Reports to ITU-T SG4 | Helped coordination of standardization work between ITU‑T SG4 and TMF. |
| [Telecom Management Collaboration - for Enhanced Telecom Operations Map (eTOM) Focus Group](http://www.itu.int/ITU-T/studygroups/com04/tmc/etom/index.html) | SG4/TMF | 2003-11/2005-02 | 15 | Reports to ITU-T SG4 | Helped coordination of standardization work between ITU‑T SG4 and TMF. |
| [Full-Service VDSL (FS-VDSL) Focus Group](http://www.itu.int/en/ITU-T/focusgroups/a7/Pages/fsvdsl-case.aspx)[[3]](#footnote-3) | SG16 | 2002-05/2003-05 | 12 | One Focus Group Technical Specification (FGTS) in five parts:[TS: Part 1: Operator Requirements](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-FSVDSLTS-2002-P1)[TS: Part 2: System Architecture](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-FSVDSLTS-2002-P2)[TS: Part 3: Customer Premises Equipment](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-FSVDSLTS-2002-P3)[TS: Part 4: Physical Layer Specification for Interoperable VDSL Systems](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-FSVDSLTS-2002-P4)[TS: Part 5: Operations, Administration and Maintenance & Provision aspects for FS-VDSL Services](http://www.itu.int/pub/publications.aspx?lang=en&parent=T-FG-FSVDSLTS-2002-P5) | First triple-play specifications issued by ITU‑T, preceding the IPTV‑related work by about two years: Applicable parts of the deliverable published as two Recommendations and one Supplement (ITU-T [H.610](http://www.itu.int/rec/T-REC-H.610). [H.611](http://www.itu.int/rec/T-REC-H.611) and [H.Sup3](http://www.itu.int/rec/T-REC-H.Sup3/en)).FG was the first case of interning of an external consortium as an ITU group.Deliverable was the first ITU‑T Focus Group Technical Specifications (FGTS) produced. |
| [Focus Group on Accounting Rate Reform](http://www.itu.int/ITU-T/studygroups/com03/accounting-rate/focusgroup/index.html) | SG3 | 1998/1998 | 12 | Report to ITU-T SG3 | Draft transitional arrangement adopted by Study Group 3. |

Table A.4 – Focus Groups by year (1998-2017)

| Year | Number of Focus groups established during that year | Number of Focus Groups terminated during that year  | Number of co-existing Focus Groups during the year[[4]](#footnote-4) |
| --- | --- | --- | --- |
| 1998 | 1 | 1 | 1 |
| 1999 | 0 | 0 | 0 |
| 2000 | 0 | 0 | 0 |
| 2001 | 0 | 0 | 0 |
| 2002 | 1 | 0 | 1 |
| 2003 | 1 | 1 | 2 |
| 2004 | 4 | 0 | 5 |
| 2005 | 2 | 3 | 7 |
| 2006 | 3 | 1 | 7 |
| 2007 | 0 | 2 | 1 |
| 2008 | 2 | 4 | 2 |
| 2009 | 3 | 2 | 4 |
| 2010 | 2 | 1 | 5 |
| 2011 | 1 | 2 | 5 |
| 2012 | 4 | 0 | 5 |
| 2013 | 2 | 5 | 7 |
| 2014 | 2 | 1 | 5 |
| 2015 | 1 | 4 | 3 |
| 2016 | 0 | 2 | 2 |
| 2017\* | 0 | 0 | 0 |

NOTE \* - Position on 2017-02-22

1. The shortest lifecycle of a focus group was nine and the longest 3 years and 11. [↑](#footnote-ref-1)
2. In addition to specific impacts, most FGs had deliverables published in the ITU website and available for public consumption. [↑](#footnote-ref-2)
3. This Focus Group was the "internalization" of an existing industry forum — the FS-VDSL Committee — which was in operation for some years before it became an ITU-T FG. The Consortium developed several specifications that were turned into Focus Group Technical Specifications and subsequently approved by SG16 as ITU-T two Recommendations and one Supplement. [↑](#footnote-ref-3)
4. Note that the data in Column 3 reflects the actual number of focus groups that were existing at any point during the year. [↑](#footnote-ref-4)