



WORLD TELECOMMUNICATION
STANDARDIZATION ASSEMBLY



ITUWTSA

NEW DELHI**2024**

15-24 October 2024
New Delhi, India

Committee 4 - ITU-T work programme and organization - Overview of results

Martin Adolph
ITU/TSB

October 2024





COM4 Tuk Tuk Parade

- To submit to the plenary meeting reports including proposals on the programme and organization of the work of ITU-T consistent with ITU-T strategy and priorities, on the basis of the proposals of ITU Member States and ITU-T Sector Members and the TSAG reports submitted to the assembly. It shall specifically:
 - i. propose a set of study groups;
 - ii. review the Questions set for study or further study;
 - iii. produce a clear description of the general area of responsibility within which each study group may maintain existing and develop new Recommendations, in collaboration with other groups, as appropriate;

[...]

- To review the proposals regarding Resolutions and any other document assigned in DT/1
- To review the proposals of Working Groups 4A and 4B of Committee 4 and submit proposals to plenary.
- [...]

- 6 new WTSA Resolutions (ADD)
- 29 revised WTSA Resolutions (MOD)
- 3 NOC
- 11 WTSA-24 Actions
- **COM4 executive summary in: Doc/114**
- Pro tip: see (pre-EDCOM) changes introduced by COM4 in existing Resolutions in COM4 white series: Doc/60, 64, 81, 82, 83, 92, 94, 95, 96, 101, 102, 110, 111

Scope and mandate of the ITU Telecommunication Standardization Sector study groups

- New title
- Consolidation of ex SGs 9 and 16 – SG21
- Annex A, PART 1 – GENERAL AREAS OF STUDY
 - Updated description for all but two Study Groups
- Annex A, PART 2 – LEAD ITU-T STUDY GROUPS IN SPECIFIC AREAS OF STUDY
 - Updated lead roles for all but three Study Groups
- Annex B, Points of guidance to the study groups
 - Updates concern all Study Groups
- Mostly based on the preparatory work from Study Groups

Scope and mandate of the ITU Telecommunication Standardization Sector study groups

Questions for study

- WTSA-24 approved the Questions as proposed by the Study Groups, with one exception
- Contribution 1 to all Study Groups: “Title, mandate, lead roles, points of guidance and Questions for ITU-T Study Group [n] in the study period 2025-2028”

Scope and mandate of the ITU Telecommunication Standardization Sector study groups

Res.2-related WTSa-24 actions

1. instructs **Study Groups 17 and 20** to establish a **joint coordination or agreement mechanism** between the study groups to determine a **demarcation line** on the topic of **IoT security, and report to TSAG**.
2. instructs ITU-T study groups, inter alia **Study Groups 13, 17 and 20**, to establish a **coordination mechanism** the study groups in order to deliberate on the topic of "**trust**" (including trusted information) and "**trustworthiness**", and report to TSAG.
3. instructs ITU-T **Study Groups 2 and 20** to establish a **joint coordination or agreement mechanism** between the study groups to determine a **demarcation line for IoT identification and NNAI aspects, and report to TSAG**.

Scope and mandate of the ITU Telecommunication Standardization Sector study groups

Res.2-related WTSA-24 actions

4. instructs **TSAG** to study the concept and effectiveness of **Lead Study Groups** used in Resolution 1 §2.1.5, e.g., to **clarify criteria for determination of lead roles, harmonize the description of lead SGs and improve the collaboration amongst ITU-T SGs**, taking into consideration inter alia WTSA Resolution 99 (rev. New Delhi, 2024), and report the conclusions to the next WTSA. The ITU-T SGs should be involved in this process to already take this review process into consideration during the preparations for the next study period.

Standardization activities of the ITU-T on AI technologies in support of telecommunications/ICTs

resolves to instruct study groups of the ITU Telecommunication Standardization Sector, within their mandates

- 1 to continue work on applying AI to telecommunications/ICTs when developing ITU-T Recommendations, guidelines, best practices and assessment procedures, such as those related to telecommunication operation, management, energy aspects, reliability, security, AI-enabled networks and protocols, and services and applications, the Internet of Things, and tools to enhance the efficiency and capabilities of AI-enabled telecommunications/ICTs;
- 2 to periodically review and update AI-related ITU-T Recommendations in relation to telecommunications/ICTs in view of technological progress and emerging opportunities and challenges

Enhancing standardization activities on sustainable digital transformation

instructs the study groups of the ITU Telecommunication Standardization Sector, within their existing mandates

- 1 to develop ITU-T Recommendations, guidelines and best practices that will help the membership, in particular developing countries, to take advantage of new and emerging telecommunications/ICTs in order to support sustainable digital transformation across different industries and telecommunications/ICTs within ITU's mandate;
- 2 to coordinate and collaborate with other groups within ITU and recognized SDOs and institutions with primary responsibility for standards development and capacity building in the area of sustainable digital transformation;
- 3 to develop and promote Recommendations to leverage digital technologies, applications, services, and platforms related to telecommunications/ICTs, to drive sustainable digital transformation,

Key highlights



**Innovative
Standards**



**Capacity
Building**



**Empower
Development**



**Global
Collaboration**

www.itu.int/wtsa2024

Enhancing standardization activities on digital public infrastructure

instructs the Telecommunication Standardization Advisory Group

to coordinate standards-development activities across the relevant ITU-T study groups on the telecommunication/ICT aspects of digital public infrastructure, in the light of the results of the gap analysis conducted in accordance with the *instructs Director of Telecommunication Standardization Bureau 1* of this resolution,

instructs the study groups of the ITU Telecommunication Standardization Sector

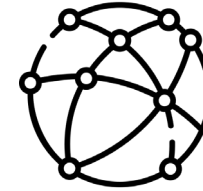
- 1 to assist the Director of Telecommunication Standardization Bureau by compiling relevant existing work that could support digital public infrastructure;
- 2 to develop ITU-T Recommendations, and other ITU-T deliverables, within their existing mandates, that can lead to the sustainable, interoperable, inclusive and efficient adoption of digital public infrastructure;

Key highlights

Promoting and strengthening metaverse standardization

instructs the relevant study groups of the ITU Telecommunication Standardization Sector, each within their mandate

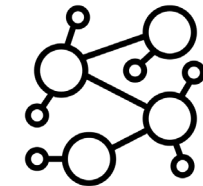
- 1 to consider the deliverables developed by the ITU-T FG-MV, taking into account the guidance from TSAG on conducting a gap analysis to scope the work and minimize overlap with other SDOs;
- 2 to undertake pre-standardization work as necessary;
- 3 to develop standardization work, as appropriate to their respective study Questions;
- 4 to study metaverse-related standardization work, taking into consideration the need for interoperability between different metaverse applications, systems and services



Connectivity and
access



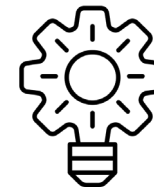
Support for Developing
Countries



Interoperability



Security and
trust



Global Initiative
on CitiVerse



JCA on
metaverse

Provision of handset-derived caller location information for emergency communications

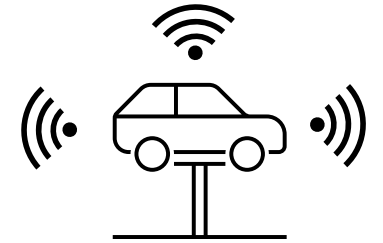
resolves to instruct

- 1 SG2, as the lead study group on this issue, to study, in collaboration with other ITU-T study groups, in particular SGs 11 and 17, and in cooperation with organizations with specific expertise in this area, the necessary requirements for establishing and transmitting handset-derived caller location information to emergency services; and to consider a gap analysis of standardization activities at other SDOs;
- 2 SG2 and other relevant ITU-T study groups to develop operational recommendations for the deployment of technical solutions for establishing and transmitting handset-derived caller location information in ITU Member States in coordination with associated regional groups, so that a common basis for deployment can be established;
- 3 SG2 and other relevant ITU-T study groups, in collaboration with the ITU-D, to promote the concept and benefits of handset-derived caller location information in improving public safety

Promoting and strengthening standardization activities for vehicular communications

instructs

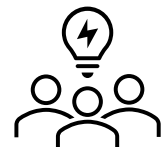
- 1 SG2 to foster standardization activities related to NNAI issues related to vehicular communications, such as V2X, and ITS, including vehicular communications to support automated driving;
- 2 SG12 to foster standardization activities of QoS and quality of experience in relation to vehicular communications, such as V2X, and ITS, including vehicular communications to support automated driving;
- 3 ITU-T Study Group 21 to develop ITU-T Recommendations aimed at implementing vehicular communications, such as V2X, and ITS, including vehicular communications to support automated driving, covering requirements, use cases, functional architecture, interfaces, standards roadmaps, etc., taking into account the study outcomes of CITS/EG-ComAD and the outcomes of ITU-R Study Group 5 on spectrum requirements;



Standards development for vehicular communications



Application Scenarios and Use-cases



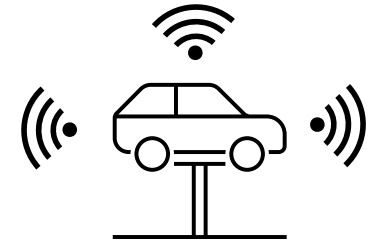
Collaboration with other SDOs and UNECE

www.itu.int/wtsa2024

Promoting and strengthening standardization activities for vehicular communications

instructs

4. SG17 to foster standardization activities related to security for vehicular communications, such as V2X, and ITS, including vehicular communications to support automated driving, covering comprehensive security solutions, security communication mechanisms, etc.;
5. SG20 to leverage the deployment of Internet of Things applications to contribute to a more connected, sustainable and safer transportation, looking in particular into interoperability and backward compatibility issues;
6. relevant ITU-T study groups to determine and assess the standardization landscape for vehicular communications, such as V2X, and ITS, including vehicular communications to support automated driving, while ensuring collaboration and avoiding overlap with other SDOs



Standards development for
vehicular communications



Application Scenarios and
Use-cases



Collaboration with other
SDOs and UNECE

www.itu.int/wtsa2024

COM4/5 – Digital identity

WTSA-24 **instructs Study Group 17**, as part of its Resolution 2 mandate as the Lead Study Group for Identity Management (IdM), to continue to develop the necessary Recommendations, Supplements, and Technical Reports for identity management and verifiable credentials. WTSA-24 also **encourages Study Group 17** to further study new areas of identity management and verifiable credential standardization topics and to coordinate and promote standardization activities. This action may help to ensure synergies, enhance coordination, and minimize duplicative efforts between ITU-T and other SDOs.

COM4/6 and 4/7 – Emergency and disaster risk management and preparedness, for early warning, risk reduction, mitigation and relief

WTSA-24 instructs the TSB Director to inform Study Groups about:

- the interoperability challenges faced with the implementation of disaster risk management for all types of systems and devices, including but not limited to, user equipment, IMT technologies, IoT, and multi-modal telecommunications;
- the rapid growth of real-time data collection and communication in early warning systems;
- new emerging technologies related to telecommunications/ICTs including AI, support emergency and disaster risk management and preparedness, for early warning, risk reduction, mitigation and relief.

WTSA-24 invites Member States, Sector Members, Academia and Associates to contribute to the development of standards to address the points above

COM4/8 – Post-quantum cryptography

WTSA-24 **instructs ITU-T SG17** to continue to develop the necessary Recommendations, Technical Reports and other ITU-T publications (including guidelines and best practices) to promote the migration to, and utilization of PQC within the remit of the Resolution 2 mandate as the lead study group on Security; and **invites Membership** to actively contribute to this work.

COM4/9 – OTTs

WTSA-24 **requests the Director of TSB** to convene workshops preferably back-to-back with relevant Study Group meetings that bring together stakeholders in the OTT ecosystem, aiming to facilitate collaboration, knowledge sharing, and consideration of diverse stakeholders' interests, while identifying and proposing innovative solutions to address their needs and interests wherever possible and report progress of workshop outcomes to TSAG.

COM4/10 and 4/11 – NGSO satellite systems

WTSA-24 **invites TSAG** to examine areas of overlap between work of the ITU-T and the work of other ITU sectors and international bodies over the next study period and provide guidance as to how ITU-T should address telecommunications standardization matters related to NGSO satellite systems within the mandates of its study groups outlined in WTSA Resolution 2 (Rev. New Delhi, 2024) and consistent with WTSA Resolution 18 (Rev. New Delhi, 2024) on allocation of work among the sectors.

WTSA-24 **invites Member States, Sector Members, Associates and Academia** to actively contribute in the relevant study groups on standardization matters related to NGSO satellite systems-based telecommunication services, consistent with WTSA-24 Action COM4/10 towards a more connected and inclusive world.

Committee 4

WTSA-24, New Delhi, 15-24 October 2024



ITUWTSA

NEW DELHI 2024

15-24 October 2024

New Delhi, India



Backup and Details

COM4: Other revised Resolutions

- Resolution 72, EMF
- Environment:
 - Resolution 73, Environment and Climate change
 - Resolution 79, e-waste
- Resolutions 78, e-health.
- Resolution 98, IoT, digital twins and SSC&C
- Resolution 77, SDN
- International Mobile Telecommunications (IMT) :
 - Resolution 92, IMT networks
 - Resolution 93, Interconnection of IMT
- Resolution 94, Cloud-based event data

COM4 key outcomes: New Resolutions

New Resolution on “Standardization activities of the ITU Telecommunication Standardization Sector on AI technologies in support of telecommunications/ICTs ”

- *recognizes the following key aspects:*
 - the necessity for global collaboration and dialogue on opportunities and potential challenges, including aspects of trustworthiness;
 - ITU's collaboration with other UN agencies and organisations in the **UN Inter-Agency Working Group on AI**, co-chaired by ITU with UNESCO
 - the **importance of the first International AI Standards Summit** from 14-18 October
- **Instructs Study Groups** to continue work on applying AI to telecommunications/ICTs in a **range of areas** including telecommunications operation, management, energy aspects, reliability, security, AI-enabled networks and protocols, and services and applications, IoTs, and tools to make AI-enabled telecommunications/ICTs more efficient and capable;

New Resolution on “Standardization activities of the ITU Telecommunication Standardization Sector on AI technologies in support of telecommunications/ICTs ”

instructs the TSB Director to facilitate information-sharing about ITU-T work on AI in telecommunications/ICTs among ITU membership, in order to build understanding, particularly for developing countries, related to the deployment of AI technologies in support of telecommunications/ICTs and the associated opportunities and challenges,

“instructs the TSB Director, in collaboration with SG, BDT and BR Directors”

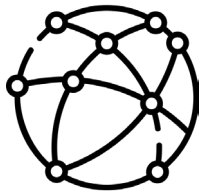
1 to support the work of the AI for Good Platform in identifying practical applications of AI to advance the SDGs and scale those solutions for global impact;

2 to identify opportunities, as appropriate, for cooperation in international standardization efforts and for collaboration with relevant stakeholders with regard to AI in telecommunications/ICTs;

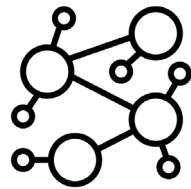
3 to provide technical guidance, particularly to developing countries, on implementing international standards on AI in telecommunications/ICTs,

New Resolution on “Promoting and strengthening metaverse standardization”

Key highlights



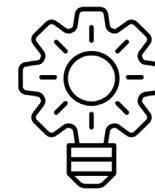
Connectivity and access



Interoperability



Security and trust



Global Initiative on CitiVerse



JCA on metaverse



Support for Developing Countries

Recognizing:

- the importance of engaging with UN organizations by means of initiatives such as the **ITU Forums on metaverse**, **UN Virtual Worlds Day**, **UN Think-a-thon** among others.

Resolves:

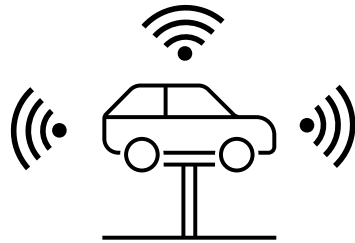
- to establish a Joint Coordination Activity - metaverse (**JCA-MV**) under TSAG.

Instructs:

- to organize **workshops and forums**, as appropriate, in collaboration with relevant SDOs and UN entities;
- to continue collaboration in the context of the **ITU-UNICC-Digital Dubai Global Initiative on Virtual Worlds – Discovering the CitiVerse**;
- to report to **ITU Council, TSAG and WTSA** on the progress in implementing this Resolution.

New Resolution on “Promoting and Strengthening Standardization Activities for Vehicular Communications”

Key highlights



Standards development for
vehicular communications



Collaboration with other
SDOs and UNECE



Application Scenarios and
Use-cases

Resolves:

- to support the coordination function of the CITS to foster international telecommunications standards on vehicular communications -such as V2X- and ITS, including vehicular communications to support automated driving, while considering the needs of various regions and member states;.

Instructs relevant ITU-T Study Groups:

- to carry out and assess a standardization landscape for vehicular communications -such as V2X- and ITS, including vehicular communications to support automated driving, while ensuring collaboration and avoiding overlap with other SDOs

Invites Member States, Sector Members, Associates and Academia

- to submit contributions and actively participate in the research of vehicular communications -such as V2X- and ITS, including vehicular communications to support automated driving, conducted by ITU-T

COM4 key outcomes: Revised Resolutions

Resolution 2: Scope and mandate of the ITU Telecommunication Standardization Sector study groups

Main changes are:

- 1) New Study Group 21 established, which is consolidated SG9 and SG16.
- 2) Updated Study Group mandate in Annex A, “Lead ITU-T Study Groups in specific areas of study” and “Point of guidance” in Annex B, based on contributions and proposal from the Study Groups
- 3) “***resolves***”
 - 3 that the study groups should consider the outputs and materials of the other two Sectors and the ITU Council relevant to a study group's terms of reference;
 - 4 study groups should collaborate with other ITU groups on issues of mutual interest;

Resolution 72 Rev. New Delhi, 2024

Measurement and
assessment concerns
related to human exposure to
electromagnetic fields

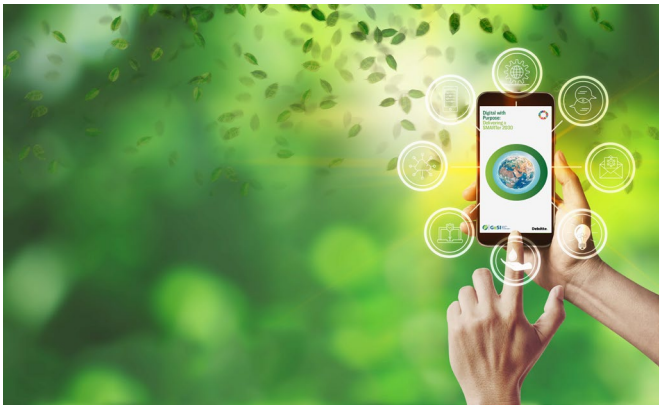


What are the main changes and key highlights?

- Consideration that:
 - the increase in the use of telecommunications/ICT equipment, has resulted in an increase in the sources of EMF emission, including simultaneous exposure from multiple sources, with a potential impact on exposure levels.
 - AI and other emerging technologies can facilitate modelling and assessment of human exposure to EMF.
- Resolves to:
 - develop technical reports and Recommendations to **support countries in formulating guidelines regarding EMF exposure;**
 - encourage **collaboration with SDOs in field of simplifying the testing process for measuring and assessing exposure to EMF to make it more accessible and cost-effective for developing countries.**

Resolution 73 Rev. New Delhi, 2024

ICT, environment, climate change and circular economy



What are the main changes and key highlights?

- More emphasis has been included to work towards minimizing the ICT environmental impact, improving e-waste management, and circularity
- Use of telecommunication/ICTs (including new and emerging) to facilitate adaptation to climate change as well as combating it
- to work towards a reduction of the negative environmental impact of materials used in ICT products,
- to work towards promoting industrial approaches in telecommunications/ICTs
- to improve the methodological anchoring of studies devoted to measuring the ICT environmental impact through the promotion of ITU-T Recommendations

Member states, sector member and associates are invited to:

- Adopt and implement ITU-T Recommendations
- Promote the collection of standardized environmental data for the telecommunications/ICT sector and ensure their harmonization across domestic data systems for easier analysis

Resolution 79 Rev. New Delhi, 2024

**The role of ICT in handling
and controlling e-waste from
ICT equipment and methods
of treating it**



What are the main changes and key highlights?

- to study and develop Recommendations and reports on methodologies related to the estimation of the life span of telecommunication/ICTs equipment and collection systems for e-waste in all geographic areas
- to develop Recommendations and promote best practices related to recycling and reuse of e-waste and promote the use of secondary/recycled materials

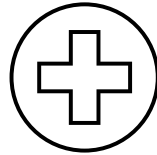
Member states, are invited to:

- include the prevention of exposure to the environmental hazards of e-waste and its treatment in their relevant policies/strategies;
- promote the circular utility of e-waste through reusing and recycling efforts
- collaborate with the relevant stakeholders in the development of sustainable and comprehensive e-waste management frameworks by adopting relevant ITU-T Recommendations and other international standards;
- encourage manufacturers to design durable devices with increased lifespan and further encourage consumers to participate in circular economy by reusing and maintaining user devices,

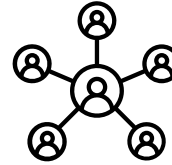
Revised Resolution 78 on “Information and communication technology applications and standards for improved access to e-health services”

Key Updates

AI: + AI for Health
ITU-WHO Focus Group
Standards based on FG-
AI4H Outputs



E-health services in
environments based on AI
and metaverse



Cooperation with SDOs



Engage with GI-AI4H
Community

resolves to instruct the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau and the Director of the Radiocommunication Bureau

5 to encourage the standardization work based on the deliverables of the FG-AI4H.

instructs Study Groups 21 and 20 of the ITU Telecommunication Standardization Sector, each according to its mandate, in collaboration with the relevant study groups, particularly Study Groups 11 and 17 of the ITU Telecommunication Standardization Sector

5 to study standards-based solutions that provide secure, interoperable and immersive e-health services in environments based on AI and metaverse;

encourages Member States, Sector Members, Associates and Academia

4 to actively engage with GI-AI4H global community that fosters knowledge sharing, and facilitates accessible and impactful solutions in the e-health field.

Revised Resolution 98 on “Enhancing the standardization of the Internet of Things, digital twins, and smart sustainable cities and communities for global development”

Key highlights



Inclusion of digital twins throughout the resolution



Smart sustainable cities and communities



metaverse and citiverse



People-centred & Multistakeholder approach



UN Initiative U4SSC

Resolves:

- to explore and study the **citiverse** to enhance urban planning, sustainability, and citizen engagement;
- to leverage the use of **open source** in the development and implementation of IoT and digital twins standards in SSC&C.

Instructs:

- to provide support and accelerate the **implementation of U4SSC KPIs** in collaboration with Member States and cities;
- to organize **forums, seminars, training programmes and workshops** including Digital Transformation Dialogues webinars.

Invites:

- to participate in **U4SSC initiative** and **Global Initiative on Virtual Worlds – Discovering the CitiVerse**;
- to cooperate and participate actively in the implementation of this resolution.

Resolution 77: Enhancing the standardization work in the ITU Telecommunication Standardization Sector for software-defined networking

Main changes are:

- 1) Simplifying the pre-amble part.
- 2) Adding Y.3100, in which the definition of “network softwarization” is described, to “*noting*” c).
- 3) ***resolves to instruct ITU-T study groups***
 - 2 *to continue to expand and accelerate the work on SDN standardization, especially carrier SDN, taking into consideration noting c);*
- 4) Deleted “***instructs to Study Group 13***”
- 5) “***instructs the Telecommunication Standardization Advisory Group***”
→ Removed specific instructions to TSAG

Resolution 92: Enhancing the standardization activities in the ITU Telecommunication Standardization Sector related to non-radio aspects of international mobile telecommunications

- ***instructs study groups of the ITU-T***

To promote standardization work on non-radio aspects of IMT systems to support verticals, such as intelligent manufacturing, as well as improving energy efficiency and reducing network complexity;

- ***instructs Study Group 2***

to continue studies on standardization activities related to non-radio aspects of IMT network management,

- ***instructs Study Group 21***

to consider any relevant impact of future vehicular multimedia systems on the standardization of non-radio aspects of IMT systems.

- ***instructs Study Group 20***

to continue addressing non-radio aspects of IMT related to standardization requirements of Internet of Things (IoT) technologies, including IoT applications in Smart Sustainable Cities and Communities (SSC&C),

Resolution 93: Interconnection of IMT networks

Main changes are:

- Title changed to simple one.
- Unified IMT designation (e.g. 4G, IMT Advance, IMT-2020 and IMT-2030) to “IMT networks”.
- ***further instructs Study Group 3***
to study charging options for IP-based voice and video interconnection of IMT networks,

Resolution 94: Standardization work in the ITU Telecommunication Standardization Sector for cloud-based event data technology

- ***instructs Study Group 17***
to develop recommendations and technical reports on end-to-end security of cloud-based event data technology including event data handling,
- ***instructs the TSB Director***
 - 2 to organize (a) workshop(s) to collect requirements and inputs on cloud-based event data technology from a wide range of various stakeholders;
 - 3 to assist Member States through knowledge sharing and capacity building on cloud-based event data technology.



WORLD TELECOMMUNICATION
STANDARDIZATION ASSEMBLY



ITUWTSA

NEW DELHI**2024**

15-24 October 2024
New Delhi, India

WG4A outcomes

Denis Andreev
WG4A secretary, TSB

October 2024



WG4A key outcomes

- the need of international telecommunication NNAI for existing and future services, including IoT and M2M (Res. 20)
- invites MSs to develop public awareness campaigns on NNAI misuse (Res.61)
- invites ITU members to contribute on the requirements to the electronic access for the repository (Res.91)
- invites MSs to share best practices on requirements and methods to differentiate the alternative calling procedures from traditional calling procedures (Res.29)
- SG2, in collaboration with SG11, to develop, deploy and maintain a procedure for selecting registration authorities including the selection of Trusted Signalling Certification Authorities (TSCA) to support the allocation of digital public certificates (Res.65)
- resolve sharing of IPv6 experiences extended to also cover security of IPv6 (Res.64)
- Resolve, within available resources and existing budgetary limits, to continue to provide technical assistance to Member States in Africa in the implementation of a common emergency number (Res.100)
- instructs TSB Director to promote universal acceptance regarding internationalized domain names (Res.48)
- continue to study the roaming aspects of IoT/M2M services (Res.88)
- New Resolution “Provision of handset-derived caller location information for emergency communications”

Naming, Numbering, Addressing, Identification (NNAI) (1/2)

- **Resolution 20 “Procedures for allocation and management of international telecommunication numbering, naming, addressing and identification resources”**
 - indicate the need of international telecommunication NNAI for existing and new telecommunications/ICTs & innovative services, including for provision of services other than telecommunications, IoT and M2M; regroup instructs to TSB Director and ITU-T SG2
- **Resolution 60 “Responding to the challenges of the evolution of the identification/numbering system and its convergence with Internet Protocol-based systems/networks”**
 - delete the term “NGN” but leave “FN”; instead of instructing TSB Director to share experiences relevant to this Resolution but invite Member States to exchange experiences and best practices

Naming, Numbering, Addressing, Identification (NNAI) (2/2)

- **Resolution 61 “Countering and combating misappropriation and misuse of international telecommunication numbering resources”**
 - expand the scope to international telecommunication NNAI resources. Provide more detailed guidelines in resolves to invite MSs and invite MSs parts, including periodically review and update national regulations, share best experiences and develop public awareness campaigns
- **Resolution 91 “Enhancing access to an electronic repository of information on numbering plans published by the ITU Telecommunication Standardization Sector”**
 - invites ITU members to contribute on the requirements to the electronic access for the repository and encourages MSs to notify ITU their NNP information following E.129

Resolution 29 “Alternative calling procedures on international telecommunication networks ”

Main additions:

- **Recalling** WTSA Resolution 60 and WTSA Resolution 65, and Recommendation ITU-T E.157
- **Recognizing:**
 - that ACP may be potentially harmful, and could be used to conduct unsolicited activities, they may be attractive for some users due to some benefits over traditional/existing calling procedures;
 - that having different (alternate) calling procedures may create inconsistency in the user experience;
 - that possible alternative calling procedures may provide opportunities and challenges for connectivity, in the provision and use of services on international telecommunication networks, according to national regulatory requirements,
- **Invites Member States** to share their best practices in developing the minimum requirements and methods to differentiate the alternative calling procedures from traditional calling procedures.

Resolution 65 “Calling party number delivery, calling line identification and origin identification information”

- **“concerned”**:
 - that there is an ever growing increase of usage of spoofed CPN, CLI, SMS interception, voice cloning technologies
 - that previous generation signalling protocols and telecommunication networks need to consider emerging requirements
- **“noting”** ITU-T Q.3057 developed by SG11, which defines the use of digital signatures (digital certificates) in signalling exchanges, and it should be globally interoperable
- **“instructs”** SG2 in close collaboration with SG11, to develop, deploy and maintain a procedure, according to ITU-T Recommendations, **for selecting registration authorities including the selection of Trusted Signalling Certification Authorities (TSCA)** to support the allocation of digital public certificates to be used in the signalling exchange of telecommunication networks
- Service providers are **“invited”** to implement ITU-T Q.3057 and sign CLI with the public-key certificates (e.g. ITU T X.509)
- **“instructs”** TSB director to promote awareness on the misuse of numbering resources

Resolution 64 “Internet Protocol address allocation and facilitating the transition to and deployment of Internet Protocol version 6”

- Change of the title of the Resolution to align with PP Resolution 180 “*Promoting the deployment of IPv6*”
- Nearly all clauses in the Resolution were modified.
- Added “*transition to and*” to *deployment of IPv6* everywhere in the Resolution
- Under *Resolves* (2) sharing of IPv6 experiences extended to also cover security of IPv6
- Under *Instructs Director of TSB in collaboration with Director of BDT*, 3 new actions added – a) *government procurement mandating IPv6 compatible equipment* ; b) *facilitate regional discussions between Member States and stakeholders on IPv6* and c) *participate jointly in capacity building and for technical assistance to countries for setting up IPv6 test bed labs and in the transition and deployment of IPv6*.
- *Instructs Director of TSB*, new action - collaborate with relevant stakeholders to promote network devices and Customer Premises Equipment (CPE) with dual-stack
- Under *Invites Member States*, 2 new actions related to sharing of best practices and expertise in IPv6 deployment and initiating stakeholder consultations to promote, facilitate and accelerate the transition to and deployment of IPv6

Resolution 100 “A common emergency number for Africa”

Key updates approved during WTSA-24

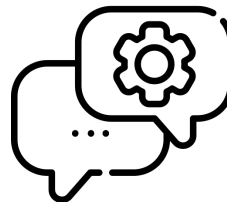
- “**Considering**” new point on the progress made in the implementation of this Resolution during the period 2022-2024.
- “**Resolves**” added "within available resources and existing budgetary limits" to continue to provide technical assistance to Member States in Africa in the implementation of a common emergency number.
- “**Invites**” invites Member States particularly in the Africa region to seek technical assistance from TSB, consider having mechanisms or guidelines that would assist in the implementation of this resolution, and share their updated numbering plan information.



Encourage uniform
emergency numbers



112 as primary,
911 as secondary



Technical assistance
to African Member
States



Share numbering
plans, establish
guidelines

New Resolution “Provision of handset-derived caller location information for emergency communications”

Instructs ITU-T SG2 and other relevant SGs

- **Study Group 2:** lead in studying requirements for handset-derived caller location and analyze standardization gaps, in collaboration with other ITU-T SGs particularly Study Groups 11 and 17
- **Develop Recommendations** for deploying caller location solutions across ITU Member States in coordination with associated regional groups
- **Collaboration** with ITU-D to promote the benefits of handset-derived caller location for public safety

Instructs the TSB Director

- **Promote Collaboration:** work with ITU-D and ITU-R to facilitate the deployment of handset-derived caller location solutions
- **Raise Awareness:** collaborate with UN entities to support international efforts for deploying these technical solutions for emergency communications.

invites Member States, Sector Members and Associates

- **Actively engage with ITU-T Study Groups** to develop recommendations, raise awareness, and promote the deployment of handset-derived caller location solutions for emergency communications

Resolution 48 “Internationalized (multilingual) domain names (IDNs) ”

Main additions:

- ***Instructs Director of TSB***
 - to promote universal acceptance regarding internationalized domain names and to collaborate and cooperate in enabling their usage on the Internet;
 - to raise awareness to ITU-T Member States and Sector Members by actively participating in relevant activities like Universal Acceptance Day and engaging with local Universal Acceptance ambassadors;
 - to support the ITU-D in engaging stakeholders, raising awareness, and incentivizing progress;
 - to continue to collaborate with relevant organizations to facilitate the adoption of IDNs and promote Universal Acceptance; and to support organizations like UNESCO to facilitate WSIS Action Line C8;
- ***Invites Director of BDT***
 - to continue to cooperate with the Director of TSB on these issues in the spirit of ‘One ITU’,
- ***Invites Member States, Sector Members and regional groups concerned***
 - to share efforts, best practices and global developments.

Resolution 88 “International mobile roaming”

Main additions:

- ***Considering further***
 - the ITU-T Technical Report on Roaming Aspects of IoT and M2M, which emphasized the fundamental differences between traditional telecommunication services and IoT/M2M services;
 - it is important to distinguish M2M roaming from traditional consumer voice and data roaming, as the issues and implications arising are quite different and the problems associated with consumer roaming prices do not materialize”,
- ***Resolves***
 - that ITU-T Study Group 3 continue to study the economic effects of IMR rates, including principles and methodologies for facilitating fair and reasonable IMR arrangements;
 - that ITU-T Study Group 3 continue to study the roaming aspects of IoT/M2M services.



ITUWTS

NEW DELHI**2024**

15-24 October 2024

New Delhi, India

Thank you



WORLD TELECOMMUNICATION
STANDARDIZATION ASSEMBLY



ITUWTSA

NEW DELHI**2024**

15-24 October 2024
New Delhi, India

WG4B outcomes

Rob Clark
WG4B secretary, TSB

October 2024



WG4B key outcomes: New Resolutions, Actions and Suppressions

- New Resolution on “Enhancing standardization activities on sustainable digital transformation”
- New Resolution on “Enhancing the standardization activities on digital public infrastructure”
- No Change (NOC) to Resolution 95, Quality of service
- WTSA-24 Actions:
 - Post Quantum Cryptography
 - Digital Identities

WG4B key outcomes: Revised Resolutions

- Resolution 44, Bridging the standardization gap.
- Security:
 - Resolution 50, Cybersecurity.
 - Resolution 52, Countering and combating spam.
 - Resolution 58, CIRT
- Resolution 76, C&I testing/ITU Mark programme
- Resolution 84, Protection of users
- Resolution 89, Financial inclusion
- Counterfeit and theft:
 - Resolution 96, Combating counterfeit telecommunication/ICT devices
 - Resolution 97, Combating mobile telecommunication device theft

New Resolution on “Enhancing the standardization activities on sustainable digital transformation”

Key highlights



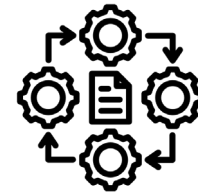
**Empower
Development**



**Global
Collaboration**



**Capacity
Building**



**Innovative
Standards**

Resolves to instruct TSAG:

- continuation of the **Rapporteur Group on Sustainable Digital Transformation** and other necessary steps.

Instructs:

- to develop ITU-T Recommendations, guidelines and best practices that will help membership in particular **developing countries** take advantage of new and emerging telecommunication/ICTs.
- to **coordinate and collaborate** with other groups within ITU and recognized SDOs.

Invites:

- to contribute to studies and development of **ITU-T Recommendations, guidelines and best practices** related to telecommunications/ICTs in support of sustainable digital transformation.

New Resolution: Enhancing the standardization activities on digital public infrastructure

- a) Focus on telecommunications/ICT aspects related to digital public infrastructure
- b) Definition of digital public infrastructure and the work being done in G20 and other fora in this area is out of scope.
- c) Need to first do a gap analysis on what exists already in ITU-T Study Groups on work related to digital public infrastructure standardization activities
- d) Director of TSB to report on the gap analysis to TSAG
- e) TSAG will then direct work in the Study Groups accordingly.
- f) Director of TSB can organize workshop and dialogues for Membership on digital public infrastructure to share lessons learned and best practices
- g) Instructs ITU-T SGs to develop Recommendations that can lead to the sustainable, interoperable, inclusive and efficient adoption of digital public infrastructure

Overview

- Under *Instructs Director of TSB*
 - a) to compile a repository of technical requirements, use cases, and standardization aspects related to digital public infrastructure;
 - b) to undertake a gap analysis to identify where ITU-T Study Groups, within their existing mandates, could pursue studies on the telecommunication/ICT standardization aspects of digital public infrastructure, and report the results to TSAG for further consideration;
 - c) to encourage promote the participation of Membership in ITU-T's activities on digital public infrastructure, including through the integration of dialogues to share experiences and lessons learned;

- **Resolution 44 - (Rev. New Delhi, 2022), *Bridging the standardization gap between developing and developed countries***

Key changes:

1. Updated references to PP, WTSA and WTDC Resolutions, providing strong guidance on the need for collaboration.
2. Emphasis on the roles of Regional Telecommunication Organizations, ITU regional offices and ITU-T regional groups.
3. Training for thematic areas of emerging technologies/ICTs.
4. Enhance BSG/training resources, including face-to-face and online, and dependent on skill level; support mentorship (common ground with next generation and gender).
5. Raise awareness of standards and assist in implementation.

Security

- Resolutions 50, 52 and 58

Res. 50 (cybersecurity)

Key additions call for:

- SG17 to address aspects of child online protection, protection of data and PII and impact of new and emerging telecom/ICTs to cybersecurity
- user-focused approach in the development of security outputs (Recs., TR, Supp.),
- integrating security capabilities in all phases of development
- Member States to continue promoting women's participation in cybersecurity initiatives

Res. 52 (spam)

Key additions call for:

- enhanced research on the application of new & emerging ICTs to counter spam,
- incorporation of risk-based approaches in development of outputs (Recs., TR, Supp.) on countering spam,
- contribution to implementation of Council Decision 630
- global awareness raising and collaboration to implement global spam-combating initiatives

Res. 58 (national CIRTs)

Key additions call for:

- both creation and enhancement of CIRTs (also reflected in title),
- development of tools to support CIRTs,
- SG17 to offer guidance on creation and enhancement of CIRTs and to collaborate with ITU-D and other SDOs in its work
- Membership to engage in SG17 work to promote understanding and creation of CIRTs

Resolution 76: Conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme

- “Studies related to” is removed from the title
- **“resolves”**:
 - to encourage collaboration with other organizations on C&I
 - to develop test suites for remote testing including federated testbeds
 - ITU-T interop events removed from the text
- **“instructs TSB Director”**
 - to support BDT Director in human capacity building and establishing test labs
 - to maintain C&I Portal to highlight outcomes on C&I
- **“instructs CASC”** to maintain TL recognition procedure and the procedure to appoint ITU-T technical experts
- **“invites TSB Director in collaboration with BDT Director”** to collaborate with MS and SM to assist in the deployment of virtual laboratories
- **“invites MS and SM”** encouraging SMEs to be involved in C&I activities

Res. 84, “Studies concerning the protection of users of telecommunication/information and communication technology services”

Main additions:

- **Recalling** PP Res. 174 and PP Res. 181, and UNGA Resolution 55/63 and 56/121
- **Noting:**
 - the importance of addressing trust and building confidence and security in the use of telecommunications/ICT in the context of user protection;
 - that end users are increasingly aware of the importance of their data and how it is being used and protected,
- **Instructs** that ITU-T Study Group 3, where appropriate with the **relevant ITU-T study groups**, within their mandates, should carry out studies on standards for protection and user-centric considerations **to build and protect consumer confidence, and improve convenience and access** to users/consumers of telecommunication/ICT services.

Resolution 89: Promoting the use of ICTs to bridge the financial inclusion gap

Main changes are:

i) New Action 5 under Resolves

to encourage collaboration between governments, telecommunication companies, and financial institutions to apply mechanisms, as appropriate, for the necessary financial resources for the required infrastructure,

ii) New actions under *Invites Member States, Sector Members and Associates*

9 to develop digital and financial literacy programmes to bridge the financial inclusion gap;

10 to support programmes to help developing countries build the technical expertise and regulatory frameworks necessary for secure and inclusive financial services.

Resolution 96: ITU Telecommunication Standardization Sector studies for combating counterfeit and tampered telecommunication/information and communication technology devices

- “tampered” is included in the title and across entire Resolution
- The term “tampered” is now defined as “making unauthorized changes” in ***“instructs TSB Director”***
- ***“resolves”***:
 - to consider solutions to be used to differentiate between authentic/genuine and counterfeit or tampered ICT devices
- ***“instructs TSB Director in collaboration with BDT Director”***
 - to promote and share best practices
- ***“instructs SG11”***
 - to study on use of emerging technologies and relevant solutions in combating counterfeit and tampered telecommunication/ICT devices

Resolution 97: Combating mobile telecommunication device theft

- ***“instructs SG11”*** to study the existing and emerging technologies to be used for combating ICT device theft
- ***“invites MS and SM”***
 - to cooperate and share expertise, use cases and best practices on combating counterfeiting and mobile telecommunications theft
 - to collaborate with industry and other stakeholders to share best practices and solutions for user information protection



ITUWTS

NEW DELHI2024

15-24 October 2024

New Delhi, India

Thank you