ITUEvents

Regional Cybersecurity Summit for Africa

20-23 November 2023 Kampala, Uganda

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UGANDA COMMUNICATIONS COMMISSION







Bridging the Standardization Gap (BSG) An Introduction to ITU, ITU-T SG 17 Security, and the Regional Group for Africa

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20-23 November 2023 Kampala, Uganda



About the International Telecommunication Union (ITU)



ITU is the United Nations specialized agency

for information and communication technologies (ICTs)

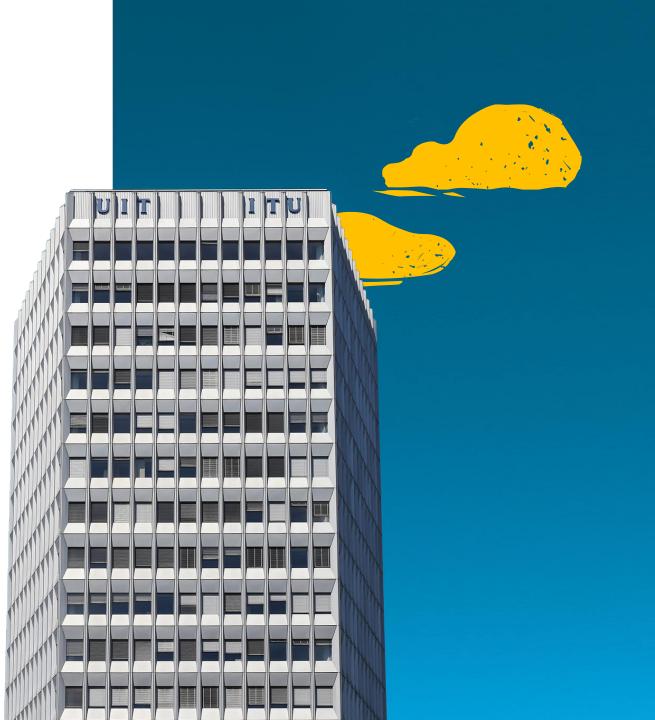


International Telecommunication Union

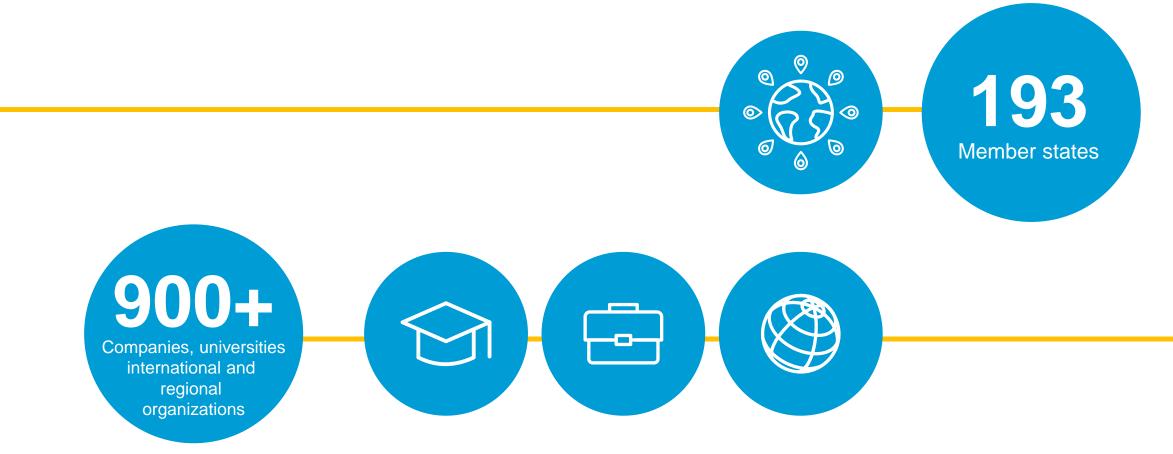
- UN specialized agency
- Headquartered in Geneva, Switzerland

Oldest agency in the UN family

- Established in 1865
- Connecting the world since the dawn of the telegraph



We are our members



Dakar

. Yaounde . Harare

Jakarta New Delhi

ITU regional presence **Regional offices** Brasilia . Addis Ababa . Cairo . Geneva . Moscow . Bangkok Area offices UN office . New York . Tegucigalpa . Santiago . Bridgetown Headquarters

•••

Geneva

• •

New and emerging technologies can advance **progress**, **prosperity and well-being** for people and the planet

ITU puts technology at the **service of humanity**:

- Promoting sustainable digital transformation and universal connectivity
- Supporting UN Sustainable Development Goals
- Leaving no one behind



What we do

ITU works to bring digital connectivity to everyone

Providing a **trusted multilateral platform** to:

- Broker international agreements and standards
- Share knowledge and build capacity
- Work with members and partners to spread access to technology around the world



Our work spans three areas, or Sectors:



Radiocommunication



Standardization



Development

Radiocommunication

- Developing and updating international regulations and regional agreements on the use of **spectrum** and associated **orbits**
- Applying these regulations
- Developing standards and best practices on the use of spectrum
- Disseminating information on these regulations, standards and best practices



Standardization

- Developing technical standards for the interconnection and interoperability of digital technologies
- Bridging the standardization gap between developed and developing countries
- Fostering cooperation among national, regional and international standards bodies





Development

- Working to **close the digital divide** and drive digital transformation:
 - Leveraging the power of ICTs
 - For:
 - economic prosperity
 - job creation
 - digital skills development
 - gender equality and diversity
 - sustainable and circular economies
 - To save lives
 - Prioritizing those **most in need**:
 - People in developing countries
 - Marginalized communities everywhere



What we do

Fostering sustainable digital transformation

- Supporting policy and regulatory reform
- Providing technical assistance
- Working to ensure the provision of reliable connectivity
- Promoting digital skills and policy guidelines
- Ensuring inclusive, equal access and use of ICTs for all

Providing global statistics

- Measuring digital divides
- Tracking digital transformation

Helping ITU Member States mitigate risks

- Facilitating emergency response preparedness
- Strengthening cybersecurity
- Helping manage e-waste sustainably





Plenipotentiary Conference



Council



Sector conferences and advisory bodies

Plenipotentiary Conference

- ITU's highest policy-making body
- Sets strategic direction every four years

Next edition

• 2026 edition Doha, Qatar





 48 Member States representing all six ITU world regions Governing body between plenipotentiary conferences

Operates through
 Council Working Groups
 and Expert Groups



Sectoral governing bodies

Radiocommunication

- World Radiocommunication
 Conference
 - Next edition: <u>WRC-23</u>, Dubai
- Radiocommunication Assembly
- Radiocommunication Advisory Group
- Radio Regulations Board

Standardization

- World Telecommunication Standardization Assembly
 - WTSA-24, India
- Telecommunication Standardization Advisory Group

Development

- World Telecommunication
 Development Conference
 - WTDC-25, Thailand
- Telecommunication
 Development Advisory Group







Introduction to the ITU-T





Study Groups

Membership-driven Study Groups develop international standards.



Focus Groups

Open to all interested parties, Focus Groups define new directions in ITU standardization.

Workshops and symposia

Open-to-all events analyze emerging trends and encourage peer-learning

 Reduced ITU membership fees available for academia, start-ups and SMEs, and companies of all sizes in developing countries



Study Groups

Membership-driven Study Groups develop international standards.

Contribution-led, consensus-based approach

to standards development in which all members can participate in the development of international standards.

ITU-T standards have **non-mandatory status** until they are adopted in national laws.

ITU-T standards can be **downloaded free of charge**.

ITU-T Study Groups

Study Groups SG3: Economic and policy SG5: Environment, EMF and SG2: Operational aspects issues circular economy SG12: Performance, QoS and QoE SG11: Protocols, testing & combating counterfeiting SG9: Broadband cable and ΤV SG16: Multimedia & digital technologies SG15: Transport, access and home SG13: Future networks SG20: IoT, smart cities & SG17: Security communities



Focus Groups

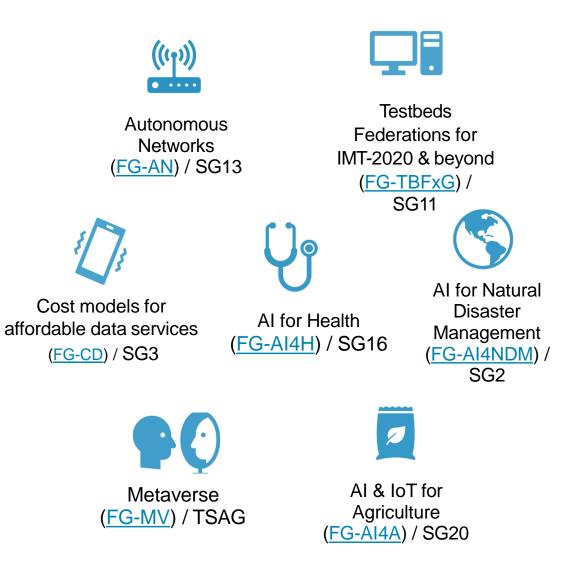
Open to all interested parties, Focus Groups define new directions in ITU standardization. Provide an additional working environment for the quick development of specifications in new areas.

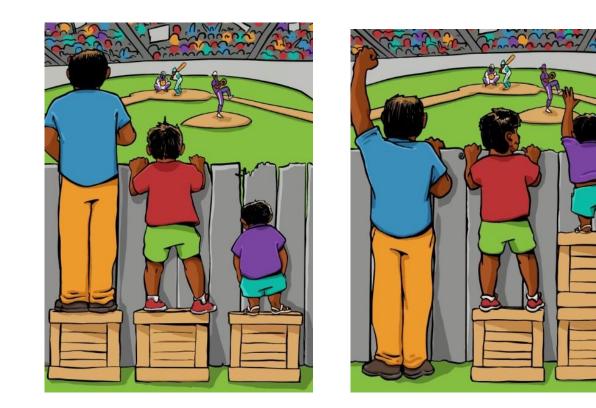
Used to address industry needs as they emerge, and when they are not covered within an existing Study Group.

Outputs are informative and feed into the work of Study Groups.



Focus Groups





Since 2016, more than



Why BSG?

- Fostering inclusivity in standards development.
- Build skills for efficient participation in ITU standardization
- Create standards that are relevant to everyone through participation in regional groups
- Promote inclusive participation in ITU-T activities.

DFS Security Lab

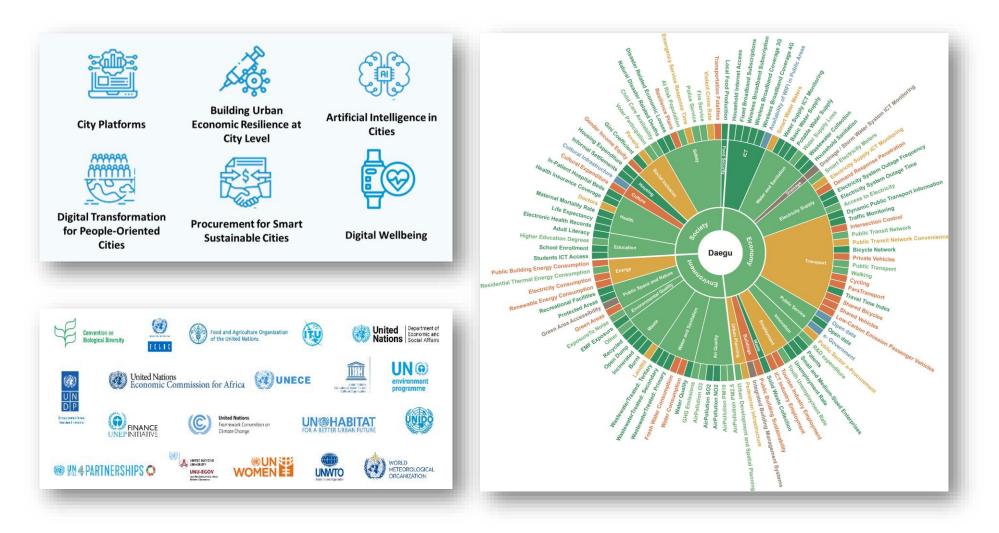
Provides a standard methodology to conduct security audit for mobile payment apps (USSD, Android and iOS) and address systemic vulnerabilities and verify compliance against security best practices and standards.

Website: https://figi.itu.int/figi-resources/dfs-security-lab/



United for Smart Sustainable Cities initiative





WTSA Resolution 54 (Rev. Geneva, 2022) resolves to support the creation of regional groups of the study groups.



Africa Region



Americas Region



Arab Region



Asia & Pacific region



EECAT Region

ITU-T Study Groups

Study Groups SG3: Economic and policy SG5: Environment, EMF and SG2: Operational aspects issues circular economy SG12: Performance, QoS and QoE SG11: Protocols, testing & combating counterfeiting SG9: Broadband cable and ΤV SG16: Multimedia & digital technologies SG15: Transport, access and home SG13: Future networks SG20: IoT, smart cities & SG17: Security communities

International Telecommunications Union (ITU) – An unofficial view

Outputs

ITU	Plenipotentiary Conference		Resolutions	
	Council [makes Decisions]			
Sectors (have conferences)	Radio Communications	Development	Telecommunications Standardization	Resolutions
	RR Board (RRB)	TD Bureau (BDT)	TS Bureau (TSB)	
Study Groups	Spectrum, Satellite, Terrestrial, Broadcasting, etc	Enabling environment for connectivity, Digital transformation, etc	Operations, Economic & Policy Issues, Security, Multimedia, Future Networks, Performance, QoS & QoE, Transport, Multimedia	Projects, publications and documents (e.g. Recommendations or standards)
Working Parties			In security, parties work on topics like IoT, network security, combating spam	Work items
Regional Groups			In Security, Regional Group for Africa on security	Support of developing countries

ITU-T SG 17 Structure

	Working Party 1	Working Party 2	Working Party 3	Working Party 4	Working Party 5
(police)	Security strategy and coordination	5G, IoT and ITS security	Cybersecurity and management	Service and application security	Fundamental security technologies
	Security standardization strategy and coordination	Security architecture and network security	Telecommunication information security management and security services	Secure application services	Identity management and telebiometrics architecture and mechanisms
	Security for/by emerging technologies including quantum- based security	Security for telecommunication services and Internet of Things	Cybersecurity and countering spam	Cloud computing and Big data infrastructure security	Generic technologies (such as Directory, PKI, Formal languages, Object Identifiers) to support secure applications
		Intelligent transport system (ITS) security		Distributed Ledger Technology (DLT) security	



ITU-T SG 17 Regional Group for Africa Objectives and Terms of Reference

Objectives:

The main objective of the Regional Group is to encourage national authorities and operators from countries in Africa to work together and better contribute to ITU-T SG17 activities in general and in line with the SG17 mandate.

Terms of Reference (Purpose):

For Africans (member states and sector members)

- Encourage and facilitate participation
- Disseminate and share relevant information and knowledge on security
- Identify priorities (and training needs)
- Strengthen standards making with Africa
- Assist Africans in implementation of recommendations

Within Africa

- Collaborate with ATU and other regional organizations in Africa
- Liaise between African administrators, operators and regulators on ICT Security Standards



ITU-T SG 17 Meetings and Other Meetings

Full Meetings

Gathering of Regional Group of Africa

Regional Group Meeting

Other meetings where you may see ITU (AfricaCERT, FIRST) ITU Cyberevents (e.g. ITU Cyberdrills) Twice a year

Twice a year (a session during ITU-T SG 17 Full Meeting)

Once a year (collaborating with others such as AfricaCERT)

All member states, invited experts, etc

Members from Africa, Other members or stakeholders including ITU

Members from Africa, Other members and stakeholders, invited experts

Resources and Products

Recommendations (ITU-T Recommendations under SG-17)

Data networks, open system communications and security, Languages and general software aspects for telecommunication systems, telephony, etc

<u>ITU-T Security Manual</u>, (Introduction to Security work of ITU-T, response to global cybersecurity challenges with international standards and recommendations)

Technical Reports, guidance documents and outreach initiatives.

<u>ITU-T Technical Report on successful use of security standards</u> (examples of ITU-T recommendations used to protect networks, people, data and critical infrastructure, offering guidance of particular value to security practitioners in developing countries)

Events and Workshops (e.g. Cybersecurity Summit, 5G Security and Beyond, Zero Trust), Tutorials (Introduction to Study Group, Standardization, Processes and Procedures)

Study Group Roles

Study Group Roles

Management team and membership:

- Study-group chairmen (and vice-chairmen)
- Working-party chairmen (and vice-chairmen)
- Rapporteurs (and associate rapporteurs)
- Liaison Rapporteurs
- Editors
- Delegates

Secretariat:

Counsellor/Advisor/Engineer/Project Officer/Assistant

www.i

SG 17 Management

Chairman Mr Heung Youl YOUM Korea (Republic of) Vice-Mr Samir ABDELGAWAD Egypt Chairmen Ms Laial ALMANSOURY Kuwait Ms Afnan ALROMI Saudi Arabia Mr Abdenour BOURENNANE Algeria Mr. Francisco Javier DIAZ Argentina Mr Gökhan EVREN Turkey Mr Yutaka MIYAKE Japan Mr Kwadwo OSAFO-MAAFO Ghana **United States** Mr Greg RATTA Mr Pushpendra Kumar SINGH India Mr Arnaud TADDEI United Kingdom Ms Wala TURKI LATROUS Tunisia China Mr Liang WEI

Supported by Secretariat:

- Xiaoya Yang, SG17 Counsellor
- Gillian Makamara, Project Officer
- Joumana Bilani, SG17 Assistant

ITU-T SG 17 RG Africa Leadership

Chairman

Kwadwo Gyamfi Osafo-Maafo

ITU-T SG 17 Vice-Chairman, Ghana



Vice Chairpersons

Racky Seye

Ministère de l'Economie numérique et des Télécommunications, Senegal



Samir Abdelgawad

ITU-T SG 17 Vice-Chairman, NTRA, Egypt.



ITU-T SG 17 Meetings and Other Meetings

Full Meetings

Gathering of Regional Group of Africa

Regional Group Meeting

AfricaCERT Meetings FIRST Meetings ITU-D SG 2 Q3/3 Twice a year

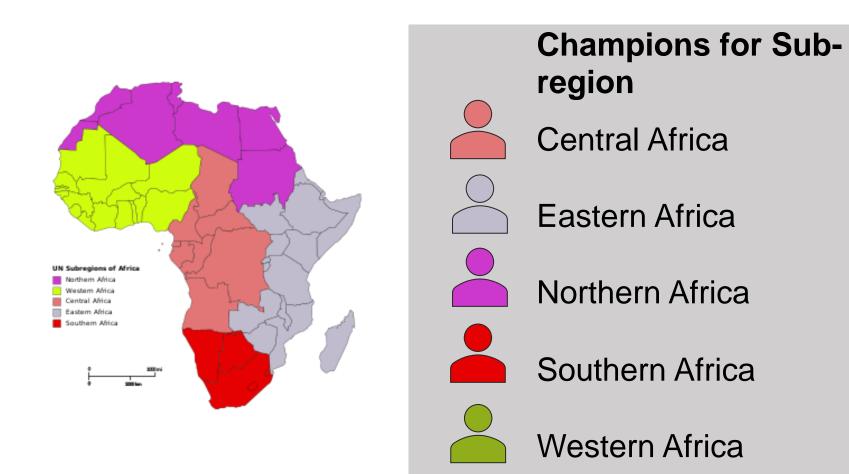
Twice a year (a session during ITU-T SG 17 Full Meeting)

Once a year (collaborating with others such as AfricaCERT, countries) All member states, invited experts, etc

Members from Africa, Other members or stakeholders including ITU

Members from Africa, Other members and stakeholders, invited experts

ITU-T SG 17 RG Africa Regional Initiatives





Lessons and Challenges

- Plan, Try, and Do: Consistency of effort
- Communication (awareness) and engagement of stakeholders
- Organizational Strategy, Objectives, Performance, Management and Operations (buy-in, involving others, support for Activities)
- Integration (e.g. organization, management systems, processes)
- Collaborations and Coordination
- Participation and utilization(virtual or physical)
- Resources (making use of resources, making time, etc)
- Perception and impact

Benefits

Capacity Development

Meetings, Discussions
Workshops, Tutorials and Events

Learning, sharing and benchmarking
Network and Community (Mentorship)
Standards, recommendations and other resources



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