# Radio Spectrum and Technical Standards Advisory Committee





## Background



- WTSA-20 was originally scheduled to be held in India in 2020
- Re-scheduled to Geneva, Switzerland due to the pandemic
- A hybrid meeting with physical and remote attendance opted by the participants

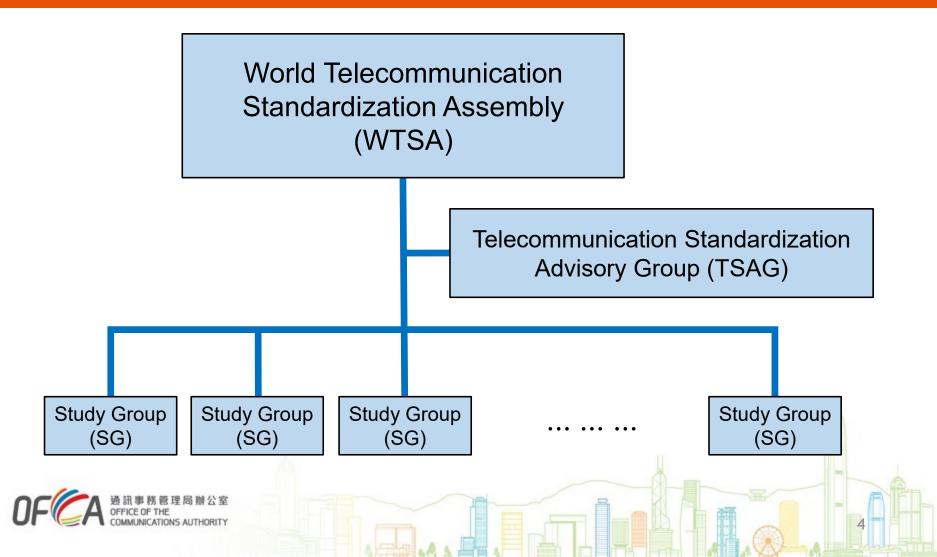


## **Participation**

- WTSA-20 was attended by more than 1200 participants from 120 member states and 70 sector members
- The Chinese delegation was led by Mr FAN Shujian, Deputy Director-General of Science and Technology Bureau of the Ministry of Industry and Information Technology (工业和信息化部科技司 范书建副司长)
- There were 28 delegates in the Chinese delegation, including 3 participants from OFCA
- Most delegates, including OFCA, attended the meeting remotely through the online communications platform



# Framework of Telecommunication Standardization Sector (ITU-T)



## **Duties of ITU-T, WTSA, TSAG & SG**

### **ITU-T**

Coordinate the development of international standards known as ITU-T Recommendations on the global infrastructure of information and communication technologies (ICT) to ensure interoperability of ICT networks and devices

### **WTSA**

- Normally held every four years
- Set the overall direction and structure of and defining the general policy for ITU-T
- Specific work include review of new and revised WTSA Resolutions (which define ITU-T working methods and identify priority issues) and structure and work of SGs for the next 4-year study period

### **TSAG**

- Resolve coordination issues among SGs
- Provide advice and procedures on relationship with other standards development organisations (SDOs)

### SG

Hands-on development of the ITU-T Recommendations



### **Structure of WTSA-20**

### **Plenary**

#### Default for all decisions/discussion

Major work items -

- Consideration and approval of new or revised WTSA Resolutions
- Review structure work of SGs for the study period of 2022-2024

#### COM 1 Steering Committee

Coordinate all matters concerned for the smooth execution of the work of WTSA-20

#### COM 2 Budget Control

Watch over the financial matters of WTSA-20

### COM 3 Working Method of ITU-T

Review and submit to the Plenary proposals on ITU-T working methods

### COM 4 ITU-T Work Programme and Organisation

Review and submit to the Plenary proposals on SG structure and study questions, WTSA Resolutions and ITU-T A-series Recommendations

#### COM 5 Editorial

Perfect the wording of text arising from WTSA deliberations, e.g. WTSA Resolutions, in the six official languages of ITU

# WTSA-20 Outcomes



### **WTSA-20 Outcomes at a Glance**

WTSA Resolutions	Resolutions modified : 36
	Resolutions suppressed : 4
	New Resolutions added : 2
	Resolutions remain unchanged : 20
ITU-T A-series Recommendations	Recommendations modified : 3
Study Group Structure	No major changes to the existing study group structure but WTSA-20 approved the revised titles of some SGs, and the chairmen and vice-chairmen of the SGs for the study period of 2022-24



## WTSA Resolutions (1)

36 Resolutions modified, below are those of interest to Hong Kong -

Resolution	Subject
50	Cybersecurity
72	Measurement concerns related to human exposure to electromagnetic fields
76	Studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme
92	Enhancing the standardization activities in the ITU-T related to non-radio aspects of international mobile telecommunications
97	Combating mobile telecommunication device theft
98	Enhancing the standardization of Internet of things and smart cities and communities for global development

2 Resolutions newly added -

Resolution	Subject
99	Consideration of organisational reform of ITU-T study groups
100	A common emergency number for Africa

## WTSA Resolutions (2)

4 Resolutions suppressed -

Resolution	Subject
35	Appointment and maximum term of office for chairmen and vice-chairmen of study groups of the Telecommunication Standardization Sector and of the Telecommunication Standardization Advisory Group
45	Effective coordination of standardization work across study groups in the ITU Telecommunication Standardization Sector and the role of the ITU Telecommunication Standardization Advisory Group
59	Enhancing participation of telecommunication operators from developing countries
66	Technology Watch in the Telecommunication Standardization Bureau

The final versions of all WTSA Resolutions (58 in total) are available at <a href="https://www.itu.int/pub/T-RES">https://www.itu.int/pub/T-RES</a>



### **ITU-T A-Series Recommendations**

3 ITU-T A-series Recommendations modified -

Recommendation	Title
Rec. ITU-T A.5	Generic procedures for including references to documents of other organizations in ITU-T Recommendations
Rec. ITU-T A.8	Alternative approval process for new and revised ITU-T Recommendations
Rec. ITU-T A.25	Generic procedures for incorporating text between ITU-T and other organizations

#### Note:

ITU-T A-series recommendations specify matters about the organisation and procedures of the work of ITU-T.



# **Study Group Structure** (for the Study Period of 2022-2024)

SG	Title
2	Operational aspects of service provision and telecommunication management
3	Tariff and accounting principles and international telecommunication/ICT economic and policy issues
5	Electromagnetic fields (EMF), Eenvironment, climate action change, sustainable digitalization and circular economy
9	Television and sound Audiovisual content transmission and integrated broadband cable networks
11	Signalling requirements, protocols, test specifications and combating counterfeit telecommunications/information and communication technology (ICT) devices products

SG	Title
12	Performance, quality of service and quality of experience
13	Future networks, with focus on IMT-2020, cloud computing and trusted emerging network technologies infrastructures
15	Networks, technologies and infrastructures for transport, access and home
16	Multimedia and related digital technologies coding, systems and applications
17	Security
20	Internet of things (IoT) and smart cities and communities

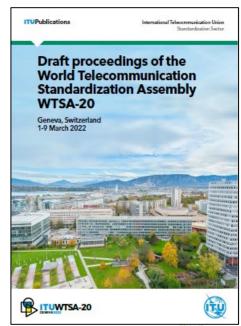
WTSA-20 approved the revised titles of some SGs as highlighted in the tables

# **Draft Proceedings of WTSA-20**

 Shortly after the closing of WTSA-20, ITU published the <u>Draft</u> <u>proceedings of WTSA-20</u> providing a handy reference to the

outcomes of the meeting

- The Draft proceedings contain -
  - Clean text of the new and revised WTSA Resolutions
  - List of suppressed WTSA Resolutions
  - Clean text of the revised ITU-T A-series Recommendations
  - Chairmen and vice-chairmen of TSAG and SGs
  - Study questions of SGs





# Highlights on Some WTSA Resolutions



# Modification of Resolution 50 - Cybersecurity

### **Objectives**

- Promote global awareness and common understanding of cybersecurity
- Strengthen regional and international cooperation to enhance confidence and security in the use of ICT
- Develop cybersecurity standards and guidelines within ITU-T

### **Modification in WTSA-20**

- Strengthen the roles of SG 17 in cybersecurity
- Instruct SG 17 to promote studies on cybersecurity including that for new services and emerging applications
- Enhance coordination function of SG 17 for effective liaison and cooperation with other SDOs



# Modification of Resolution 72 - Measurement and Assessment Concerns related to Human Exposure to EMF

### **Objectives**

 Develop ITU-T Recommendations and Reports related to EMF exposure assessment by the lead group SG 5, in collaboration with various international organisations specialised in health matters, including –









### **Modification in WTSA-20**

- Embrace new and emerging technologies (e.g. IoT, and IMT-2020 and beyond) in the assessment work on EMF exposure
- Encourage coordination within ITU and with other SDOs





# Modification of Resolution 76 - Conformance and Interoperability Testing, and a Possible Future ITU Mark Programme

### **Objectives**

- Enhance the conformance and interoperability ("C&I") of telecommunications and ICT equipment in conformity with ITU-T Recommendations from different vendors through C&I testing
- Study the possible use of the ITU Mark in the long term for easy identification of conformant equipment
- ITU-T is working, in collaboration with the accreditation bodies, on the procedure to recognise testing laboratories which are competent to test according to the ITU-T Recommendations

### **Modification in WTSA-20**

 Invite ITU-T to hold C&I testing events and to highlight the concern of developing countries about the use of C&I testing to combat counterfeit ICT products



# Modification of Resolution 92 - Standardisation Activities related to Non-Radio Aspects of IMT

### **Objectives**

 Enhance the standardisation activities related to non-radio aspects of IMT within ITU and with international collaboration



### **Modification in WTSA-20**

• Embrace "IMT-2020 and beyond" in addition to IMT-2000, IMT-Advanced and IMT-2020 to address the standardisation needs of networks beyond IMT-2020

### **Study Groups**

- Lead study group <u>SG 13</u> working on a wide range of topics –

  software-defined networking network function virtualisation emerging network technologies

  fixed/mobile/satellite convergence machine learning cloud computing and data handling

  deep packet inspection network intelligence quantum-enhanced networking innovative service
- SG 3 to contribute to the regulatory and economic issues
- <u>SG 5</u> to the environmental requirements (e.g. energy efficiency, human exposure to EMF, etc.)

scenarios

# Modification of Resolution 97 - Combating Mobile Telecommunication Device Theft

### **Objectives**

- Raise international awareness and cooperation to combat mobile telecommunication device theft
- Develop ITU-T Recommendations, technical reports and guidelines to address such problem, including measures to prevent stolen and tampered devices (unauthorised changes of unique device identifiers) from accessing the networks

### **Modification in WTSA-20**

 Highlight the application of emerging technologies (e.g. Distributed Ledger Technology) for distributed information sharing solutions



# Modification of Resolution 98 - Standardisation of IoT and Smart Cities and Communities for Global Development

### **Objectives**

- Promote international participation
- Raise global awareness of the implementation of IoT and SC&C using emerging technologies
- Develop related ITU-T Recommendations
- Help contribute to the achievement of the <u>United</u>
   <u>Nations' 2030 Agenda on Sustainable Development</u>
   ("the UN 2030 Agenda"), in particular Sustainable
   Development Goal (SDG) 11 to make cities inclusive, safe, resilient and sustainable



### **Modification in WTSA-20**

- Highlight the possibility of using IoT technology to discover and respond to global or regional crisis such as natural disasters and pandemics
- Appeal for international support, especially for developing countries, to achieve the goals of SC&C

# New Resolution - Organisational Reform of ITU-T SGs

### **Objectives**

 Develop a re-engineered ITU-T SG structure that can increase the efficiency of collaboration within ITU and with other SDOs, and is more forwarding looking, for approval at the next WTSA

### **Action Plan**

 To proceed with this work, the action plan developed by TSAG and approved at WTSA-20 will be implemented to explore the various restructuring options taking into account the following seven high level principles –

Optimised structure

Clear mandates

Enhanced coordination and cooperation

Cost effectiveness and attractiveness

Efficient and productive working methods

Timely identification of standardisation needs

Support for bridging the standardisation gap



## Way Forward

- The next WTSA is scheduled for 2024
- OFCA will
  - attend regional WTSA preparatory meetings of the Asia-Pacific Telecommunity Preparatory Group for WTSA
  - attend WTSA-24
  - brief and update SSAC in due course on the outcomes of WTSA-24 relevant to Hong Kong



