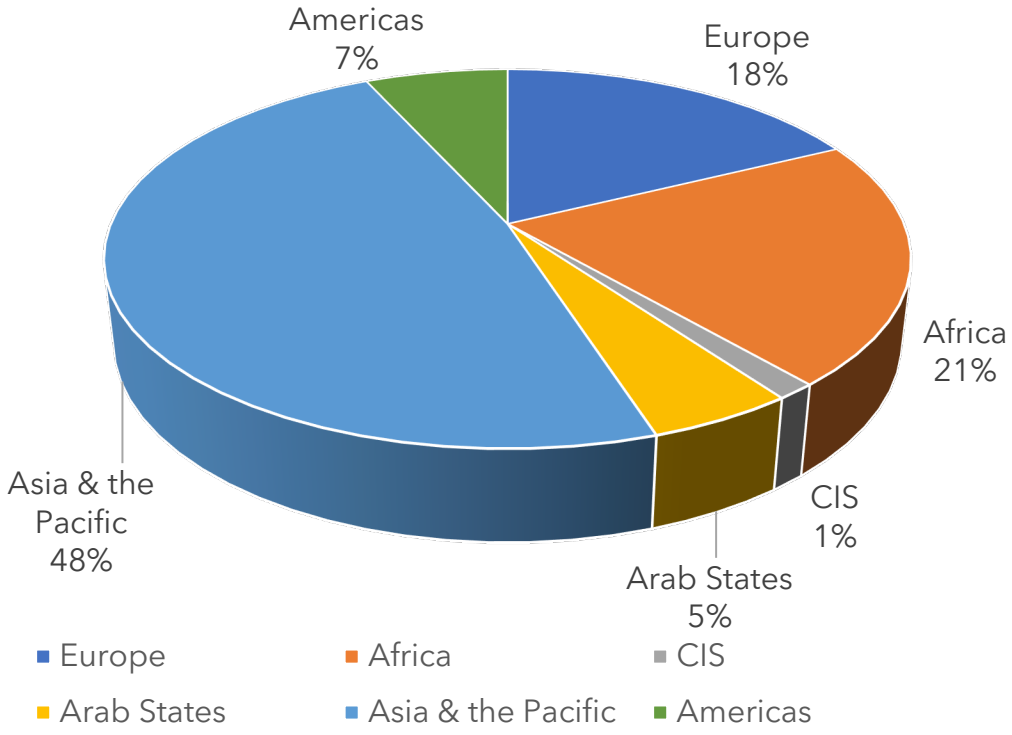
# Highlights of SG5 meeting results

Geneva, 3 – 12 June 2025

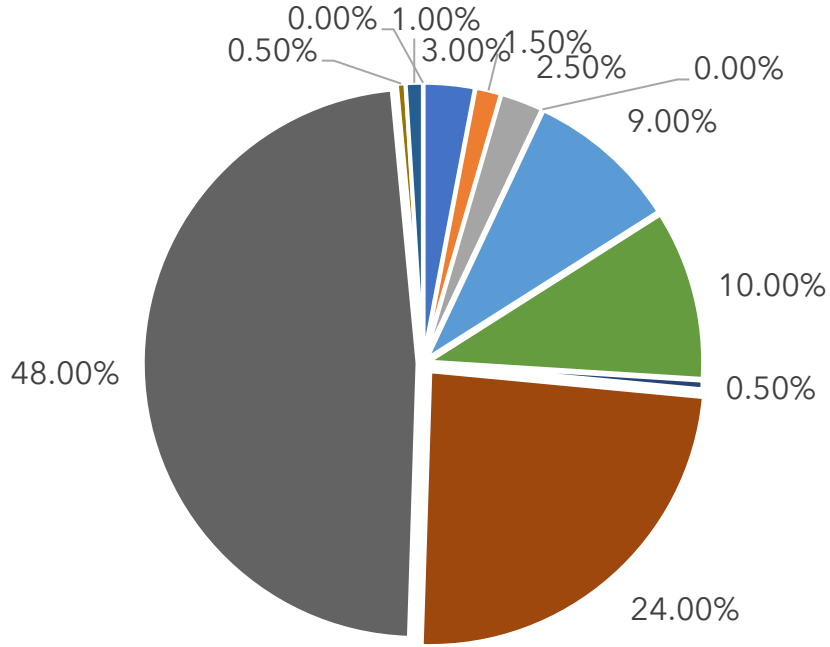
# General Information

- **Dates**: 3 – 12 June 2025 in Geneva.
- **Statistics and outcomes**:
  - **Participants**: 228 (TD47-R1)
  - **Contributions**: 187 (198 were received but 7 were withdrawn due to duplication and 4 were withdrawn due to number skipped by the system)
  - **TDs** (not counting the revisions): 484
  - **Incoming/ outgoing liaison statements**: 62 incoming liaison statements and 31 outgoing liaison statements (TD43-R5). See also LS database.
  - **Consented Recommendations:** 24 (of which 8 are revised Recommendations)
  - **Other texts agreed:** 2 at this meeting;
  - **New work items:** 28 at this meeting.

# Participants by Region




# Participants by Sector



# Main Discussions

- The objective of the SG5 meeting were to:
  - Approve the proposed SG5 structure (TD42-R1)
  - Approve the proposed SG5 Working Party Chairs and WP Vice-chairs (TD3-R1)
  - Approve the proposed SG5 Rapporteurs and Associate Rapporteurs (TD4-R3)
  - Approve the allocation of SG5 Work Items to the new Questions (TD33-R1)
  - Nomination of Liaison representatives to other organisations. Some vacancies due to delegates retirements (TD5-R5)
  - Progress the work of the different Questions.

# ITU-T Study Group 5 – approved structure

| ACRONYM | TITLE |
|---|---|
| **PLEN** | |
| **Q8/5** | Guidance and terminology on environment |
| **WP1/5** | **EMC, lightning protection, EMF** |
| **Q1/5** | Electrical protection, reliability, safety, and security of telecommunication/ICT systems |
| **Q2/5** | Equipment specification and component/device for protection against lightning and other phenomena |
| **Q3/5** | Assessment of human exposure to electromagnetic fields (EMFs) |
| **Q4/5** | Electromagnetic compatibility (EMC) aspects in telecommunications/ICTs |
| **WP2/5** | **Environmental Efficiency of new and emerging telecommunications/ICTs installations and applications** |
| **Q6/5** | Environmental efficiency of telecommunications/ICTs |
| **Q7/5** | E-waste, circular economy, and sustainable supply chain management |
| **WP3/5** | **New and emerging telecommunications/ICTs solutions for Climate Action towards Net Zero emissions** |
| **Q9/5** | Assessing the impact of telecommunications/ICTs on climate change, biodiversity and the environment - including the influence on other sectors |
| **Q11/5** | Climate change mitigation and smart energy solutions |
| **Q12/5** | Climate actions and adaptation to climate change through sustainable and resilient telecommunications/ICTs (including new and emerging) |

# Results by Working Party and Q8/5

| | WP1/5 | WP2/5 | WP3/5 | Q8/5 | Total |
|---|---|---|---|---|---|
| **Report** | TD20-R1 | TD25-R3 | TD29-R6 | TD28-R1 | - |
| **New Work Items** | 6 | 12 | 10 | - | 28 |
| **Consented Recommendations** | 6 | 14 | 4 | - | 24 |
| **Agreed Documents** | 0 | 1 | 0 | 1 | 2 |

# Consented Recommendations – Revised (1)

| ITU-T Rec. Number | Title | Question | TD |
|---|---|---|---|
| K.147 | Protection of digital ports connected to balanced pairs of conductors | 2/5 | TD348 |
| K.113 | Generation of radiofrequency electromagnetic field level maps | 3/5 | TD321-R4 |
| K.61 | Guidance on measurement and numerical prediction of electromagnetic fields for compliance with human exposure limits for telecommunication installations | 3/5 | TD382 |
| K.49 | Test requirements and performance criteria for voice terminal telephones subject to disturbance from digital mobile telecommunications systems | 4/5 | TD307-R1 |
| K.54 | Conducted immunity test method and level at fundamental power frequencies | 4/5 | TD311 |
| L.1206 | Impact on information and communication technology equipment architecture of multiple AC, −48 VDC or up to 400 VDC power inputs | 6/5 | TD289 |

# Consented Recommendations – Revised (2)

| ITU-T Rec. Number | Title | Question | TD |
|---|---|---|---|
| L.1007 Cor.1 | Test suites for assessment of the external universal power adapter solutions for portable information and Communication technology devices | 7/5 | TD455-R1 |
| L.1480rev | Enabling the Net Zero transition: Assessing how the use of information and communication technology solutions impacts greenhouse gas emissions of other sectors | 9/5 | TD368 |

# Consented Recommendations – New (1)

| ITU-T Rec. Number | Work item or provisional name | Title | Question | TD |
|---|---|---|---|---|
| K.pids | K.158 | Practical guidance for protection of the indoor distribution system for mobile communication in large-scale physical buildings | 1/5 | TD297-R3 |
| L.EE_sgpu | L.1311 | Energy Efficiency measurement methodology and metrics for heterogeneous servers | 6/5 | TD287 |
| L.MCI_Gen | L.1395 | Monitoring and Control Interface for Infrastructure Equipment (Power, Cooling and Building Environment Systems used in Telecommunication Networks) - Generic Interface | 6/5 | TD374 |
| L.MCI_MIM | L.1396 | Monitoring and Control Interface for Infrastructure Equipment (Power, Cooling and Building Environment Systems used in Telecommunication Networks) - ICT equipment power, energy and environmental parameters monitoring information model | 6/5 | TD338-R1 |
| L.MCI_Bat | L.1397 | Monitoring and control interface for infrastructure equipment (Power, Cooling and environment systems used in telecommunication networks) - Battery system with integrated control and monitoring information model | 6/5 | TD294-R1 |
| L. ME_DD | L.1025 | Assessment of material efficiency of ICT network infrastructure goods (circular economy); Part 2: Server and data storage product secure data deletion functionality | 7/5 | TD326 |

# Consented Recommendations – New (2)

| ITU-T Rec. Number | Work item or provisional name | Title | Q | TD |
|---|---|---|---|---|
| L.ME_AF | L.1080 | Assessment of material efficiency of ICT network infrastructure goods (circular economy); Part 3 Server and data storage product availability of firmware and of security updates to firmware | 7/5 | TD325 |
| L.DMTT | L.1018 | Specification for the durability assessment of mobile telecommunication terminals | 7/5 | TD302-R2 |
| L.UFCS | L.1004 | Universal Fast Charging Solution for mobile terminals | 7/5 | TD310-R2 |
| L.DLB | L.1011 | Guidelines for the durability assessment of Lithium-ion Batteries | 7/5 | TD298-R2 |
| L.GPSIM | L.1081 | Good practices for the sanitization of the information media in end-of-life ICT user devices | 7/5 | TD303 |
| L.e-waste-collection | L.1037 | Guidelines on the collection, pre-treatment, dismantling, valorization and final disposal of WEEE | 7/5 | TD397 |

# Consented Recommendations – New (3)

| ITU-T Rec. Number | Work item or provisional name | Title | Question | TD |
|---|---|---|---|---|
| L.CircularCity KPIs | L.1621 | Key Performance Indicators for circular cities | 7/5 | TD327-R1 |
| L.WHR | L.1328 | Specification for waste heat reuse in telecommunication rooms and data centers | 11/5 | TD304-R4 |
| L.MM&BP_IP | L.1491 | Measurement methodology and best practices for decarbonization of industrial park in support of net zero | 11/5 | TD314-R4 |
| L.KPIs_Infratr ucture | L.1510 | Environmental Key Performance Indicators for Digital Infrastructure Adapting to Climate Change | 12/5 | TD337-R3 |

# Agreed Documents

## Informative texts

| Document | Work item or provisional name | Title | Question | TD |
|---|---|---|---|---|
| Technical Report to L.1071 | L.TR-CONF-to-L.1071 | Guidance on conformity assessment of ICT goods/products to standards for ITU-T L.1071/ETSI ES 204 082 | 7/5 | TD354 |
| L.Suppl.61 | L.supAiter | Standardized glossary of terms of AI and other Emerging Technologies to Ensure Environmental Efficiency | 8/5 | TD270-R1 |

# Approved New Work Items (1)

| ITU-T Rec. Number | Title | Question | TD |
|---|---|---|---|
| K.Actual_Max | Guidance on implementation of Actual Maximum Approach for assessment, evaluation, compliance and monitoring of RF EMF | 3/5 | TD394-R1 |
| K.83 | Monitoring of electromagnetic field levels | 3/5 | TD386 |
| K.Suppl.32 | Case studies of radio frequency-electromagnetic field (RF-EMF) assessment | 3/5 | TD417 |
| K.61 | Guidance on measurement and numerical prediction of electromagnetic fields for compliance with human exposure limits for telecommunication installations | 3/5 | TD382 |
| Revision of K.49 | Test requirements and performance criteria for voice terminal telephones subject to disturbance from digital mobile telecommunications systems | 4/5 | TD313 |
| Revision of K.54 | Conducted immunity test method and level at fundamental power frequencies | 4/5 | TD312 |
| L.Testing_LCR | Testing Guidelines for Cold-plate Liquid Cooled Cabinet in Data Centre | 6/5 | TD430-R2 |

# Approved New Work Items – Continued (2)

| ITU-T Rec. Number | Title | Question | TD |
|---|---|---|---|
| L.DSEC | Requirements for energy efficiency management of data storage in data centres | 6/5 | TD450-R2 |
| L.Water_DC | Guidance on Water Conservation Strategies in Data Centres | 6/5 | TD395-R1 |
| L.Suppl_SBS | Solutions and Practices for Sustainable Base Station Sites in Off-grid Remote Area | 6/5 | TD406-R2 |
| L.TR_750VDC | 750 V DC power feeding systems for data centre | 6/5 | TD410-R1 |
| L.MF_ACinDC | Monitoring framework for low-voltage AC power feeding system in data centre | 6/5 | TD456-R1 |
| L.1022rev | Circular economy: Definitions and concepts for circular economy for information and communication technology | 7/5 | TD339 |
| L.SPV_EOL | Framework and Requirements for Sustainable End-of-Life Management of Solar Photovoltaic Panels | 7/5 | TD460 |

# Approved New Work Items – Continued (3)

| ITU-T Rec. Number | Title | Question | TD |
|---|---|---|---|
| L.EW_INT_ACT | E-Waste Lifecycle Integrity and Accountability | 7/5 | TD340 |
| L.GDSR | Guidelines for Data Sanitization and Resource Recovery of End-of-Life Storage Devices | 7/5 | TD341-R1 |
| L.TR-CONF-to-L.1071 | Guidance on conformity assessment of ICT goods/products to standards for ITU-T L.1071/ETSI ES 204 082 | 7/5 | TD355-R1 |
| L.DPIS | Guidelines for a modular and scalable data system design of Digital Product Information Systems (DPIS) for ICT products | 7/5 | TD352-R2 |
| L.ITservices_footprint | Methodology to assess the environmental Footprint of data centre IT hosting services and cloud services | 9/5 | TD404-R1 |
| L.1470rev | Greenhouse gas emissions trajectories for the information and communication technology sector compatible with the UNFCCC Paris Agreement | 9/5 | TD389-R1 |
| L.Transition Plans | Guidance on Transition Plans in the ICT sector at the national and industry level | 9/5 | TD479-R1 |

# Approved New Work Items – Continued (4)

| ITU-T Rec. Number | Title | Question | TD |
|---|---|---|---|
| L.ESS-adapt | Management system architecture for container-type ESS to support environment-adaptive operation | 11/5 | TD331-R4 |
| L.ups_framework | Management system framework of UPS with Li-ion batteries for infrastructure | 11/5 | TD334-R4 |
| L.MMOC | Multi microgrid scheduling architecture and scenario requirements aiming for reduction of GHG emissions | 11/5 | TD332-R4 |
| L.TLB | Full time immersion liquid temperature-controlled Lithium Iron Phosphate battery systems | 11/5 | TD329-R2 |
| L.TR_GHG_DR | Mechanism and framework of power grid demand response based on GHG emission factor | 11/5 | TD333-R4 |
| L.Carbon_SLP | Guidelines for the Construction of Smart Low-Carbon Power Supply Facilities Adapted to Island Biodiversity | 12/5 | TD385-R3 |
| L.ICT4LGTL | Guidelines of Using ICTs for Low Carbon Transition of Logistics | 12/5 | TD393-R2 |

# ITU-T SG5 Regional Groups

## ITU-T Study Group 5 Regional Group for Latin America (SG5RG-LATAM)

Since June 2024, the SG5RG-LATAM has held two meetings:

- **Lima, Peru, 5 September 2024**.

  This meetings was preceded by a Session on Environmental Sustainable Tech in Latin America: Standards for E-Waste Management, Circular Economy and GHG Emissions Reduction (English | Spanish). These events were organized jointly with the ITU Policy and Economics Colloquium for the Americas (IPEC 24). The meeting was attended by 13 participants from five countries.

  The report of this meeting is available as SG5RG-LATAM Report 1.

- **Santo Domingo, Dominican Republic, 6–8 May 2025**.

  This meeting was kindly hosted by the Instituto Dominicano de las Telecomunicaciones (INDOTEL) Dominican Republic. The meeting was a joint meeting with ITU-T SG20RG-LATAM.

  These meetings were organized in conjunction with the following events:

  - 6–7 May 2025: INDOTEL 4.0
  - 8 May 2025: Forum on Sustainable Digital Transformation in Latin America

  The meeting was attended by 38 participants from 14 countries. Additionally, the SG5RG-LATAM agreed to the revised Terms of Reference as contained in TD254.

  The report of the SG5RG-LATAM is available as TD253 and SG5RG-LATAM Report 1.

# Dates of the next ITU-T SG5 meeting and upcoming events


- **WSIS side event** - Digital solutions for sustainability: ICT's role in GHG reduction and biodiversity protection, Geneva, 8 July 2025
- **WSIS side event** - From data to impact: Digital Product Information Systems and the importance of traceability for global environmental governance, Geneva, 8 July 2025
- **AI4Good Workshop** - Navigating the Intersect of AI, Environment and Energy for a Sustainable Future, Geneva, 10 July 2025
- **ITU-T Study Group 5**, Geneva, 29 October – 6 November 2025 (tbc)

# Thank you!

# Main decisions taken by WTSA

The Study Group 5 Chair provided a brief overview of the highlights of WTSA-24. The following TDs and Documents were presented and noted:

- TD40-R1 - Highlights of WTSA-24 relevant to ITU-T Study Group 5
- Resolution 2 (Rev. New Delhi, 2024) "Scope and mandate of the ITU Telecommunication Standardization Sector study groups". See section related to "Mandate of Study Group 5: Area of responsibility, Lead Study Group, Points of Guidance, Recommendations under its responsibility"
- C1 - Title, mandate, lead roles, points of guidance and Questions for ITU-T Study Group 5 in the study period 2025–2028
- TD41-R1 - WTSA-24 Resolutions of interest to Study Group 5
- TD261 - Draft Action plans for implementation of WTSA-24 Resolutions 72, 73 and 79 (Rev. New Delhi, 2024) (Environment, climate action, circular economy and electromagnetic fields)
- WTSA-24 Proceedings - Review of new/revised Resolutions and A-series Recommendations