



# **“Partnership 4 Digital Knowledge”**

Session 5: Role of **Academia** in Digital Development  
@ ITU RDF Asia and the Pacific Region

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International Telecommunication Union**



# Agenda

- ICT Ecosystem @ Digital Society
- ITU Membership: ***Academia***
- ITU ***Knowledge Platforms & Products***
- ***Role of Academy***  
@ ITU Platforms & Products

# ICT Ecosystem @ Digital Society



# Unique ITU Membership

193 Member States + over 700 Sector Members + over **167 Academia**

**More than 167 universities** and research centers  
in **50+** countries



<http://www.itu.int/online/mm/scripts/gensel11?memb=SAU>

# ITU Academia Membership Benefits



Join us as **Academia Member**

@ <https://www.itu.int/en/myitu/Membership/Become-a-Member/Benefits>



# ITU Knowledge Platforms & Products

## ITU Academy

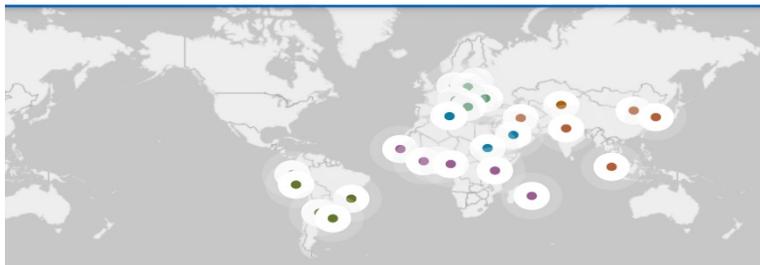
**ITU Academy**  
*Empowering minds*

<https://academy.itu.int/>

Education Training Resources

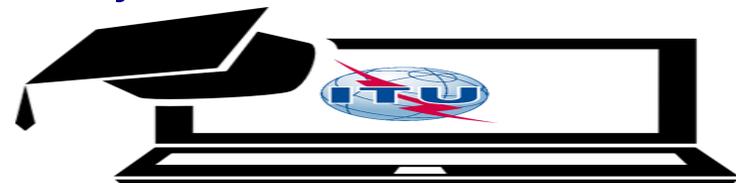
- **Academia** serves as experts & trainers
- Certified Training Activities in 29 Centers of Excellence Worldwide

 **ITU Academy**  
*Empowering minds*



## ITU Publications

Studying, surveying, publishing & disseminating emerging questions, themes and issues on ICT development for digital society.



Looking for renowned **Academia** for high-quality research, publications, & *ITU Journal*.

<https://www.itu.int/pub/S-JOURNAL>



# ITU Academy: Objectives

*Empowering minds*

- The ITU Academy was developed following the outcomes of WTDC-10 (Objective 5 of the ITU-D contribution to the ITU Strategic Plan)
- The ITU Academy was officially launched in 2012 as an ITU-wide initiative ***partnering with multi-stakeholders***.
- The objectives:
  - Serve as a **one-stop-shop** for ITU's capacity development activities
  - Bring together under one umbrella a wide range of **training activities and knowledge resources**
  - Harmonize and integrate all ITU capacity development products and services
  - Provide a gateway to ITU's online **learning**

More details @ <https://academy.itu.int/>



# ITU Academy : Main Features

*Empowering minds*

The ITU Academy is an online platform featuring ITU's capacity development and training activities with ***multi-stakeholders' partnership: e.g., Academia***  
It is comprised of two systems:

- A **content** management system (CMS) featuring information on ITU's activities and links to capacity building events, workshops and training courses
- A **learning** management system (LMS) featuring a fully-fledged online learning environment



## Asia & Pacific Academia & R&D @ CoE

- ✓ [Advanced Level Telecoms Training Centre India \(ALTTC\)](#)
- ✓ [China Academy of Information and Communications Technology \(CAICT\)](#)
- ✓ [IoT Academy \(IoTA\)](#)
- ✓ [National Information Society Agency \(NIA\)](#)
- ✓ [State Radio Monitoring Centre \(SRMC\)](#)
- ✓ [Wireless Communication Centre, Universiti Teknologi Malaysia \(UTM\)](#)



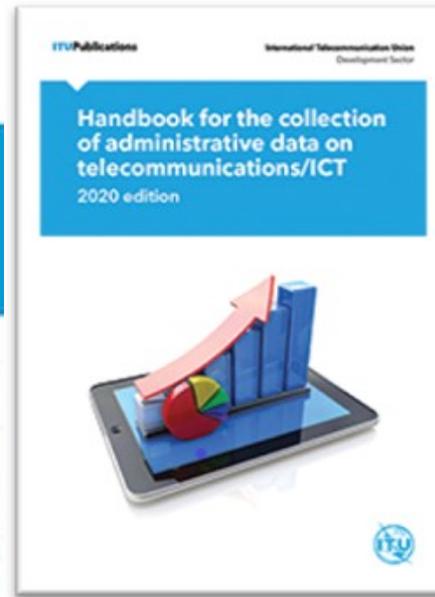
# ITU Publications

#ICT4SDG

ICT-centric economic growth, innovation and job creation



International Telecommunication Union  
Development Sector  
Impact of COVID-19  
Infrastructure



Regional Initiatives  
Europe

The economic contribution of broadband, digital and ICT regulation: An econometric model for the ITU Europe region



Regional Initiatives  
The Americas

Estudio de Interconectividad y Reducción de Costos de Acceso a Internet en los Países de la Comunidad Andina  
Estado Plurinacional de Bolivia, Colombia, Ecuador y Perú



Many ITU publications written by leading scholars and experts aim to **drive digital development and contribute to SDGs**: e.g., *ICT4SDG*, *Economic impact of COVID-19*, *Economic contribution of broadband*, *Administrative Data*, *ITU Journal* etc. in addition to *ITU-D study Reports* driven by members' contributions.

<https://www.itu.int/pub/D-PREF-EF/en>

e.g.

## ***Digital Skills Insights***

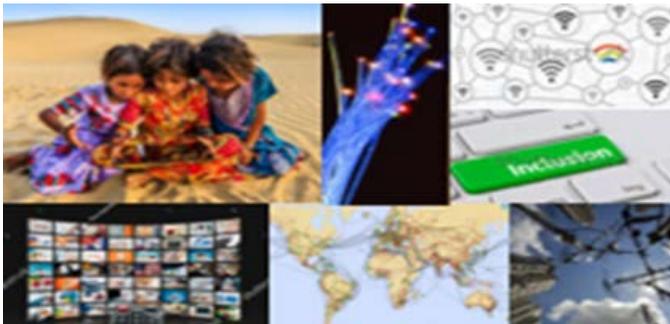
- Online publication launched in 2017 and released annually: **2020 edition now available**
- Puts together ***scholarly articles*** in the field of capacity building and skills development in the digital era
- Addresses the ongoing discussion on how digital technologies are transforming job markets, determining new skills set requirements and driving the digital economy requirements for re-skilling
- Target group: experts & **academia** in the field of digital technologies, including researchers, policymakers and practitioners
- More publications @ <https://www.itu.int/en/publications/ITU-D/Pages/default.aspx>



# ITU Study Groups & Questions

## ITU-D Study Group 1

Enabling environment for the development of Telecoms/ICTs



## ITU-D Study Group 2

ICT services and applications for the promotion of sustainable development





# ITU-D Study Group 1: Enabling environment for the development of telecommunications/ICTs

- **Question 1/1:** Strategies and policies for the **deployment of broadband** in developing countries
- **Question 2/1:** Strategies, policies, regulations and methods of migration and adoption of **digital broadcasting** and implementation of new services
- **Question 3/1:** Emerging technologies, including **cloud computing, m-services, and OTTs:** Challenges and opportunities, economic and policy impact for developing countries
- **Question 4/1:** Economic policies and methods of determining the **costs of services** related to national telecommunication/ICT networks
- **Question 5/1:** Telecommunications/ICTs for **rural and remote areas**
- **Question 6/1: Consumer information, protection and rights:** Laws, regulation, economic bases, consumer networks
- **Question 7/1:** Access to telecommunication/ICT services by **persons with disabilities and other persons with specific needs**

For more information: <https://www.itu.int/net4/ITU-D/CDS/sg/questions.asp?lg=1&sp=2018>

# ITU-D Study Group 2: ICT services and applications for the promotion of sustainable development



- **Question 1/2:** Creating **smart cities and society**: Employing information and communication technologies for sustainable social and economic development
- **Question 2/2:** Telecommunications/ICTs for **eHealth**
- **Question 3/2:** Securing information and communication networks: Best practices for developing a culture of **cybersecurity**
- **Question 4/2:** Assistance to developing countries for implementing **conformance and interoperability** (C&I) programmes and combating **counterfeit ICT equipment** and **theft of mobile devices**
- **Question 5/2:** Utilizing telecommunications/ICTs for **disaster** risk reduction and management
- **Question 6/2:** ICTs and the **environment**
- **Question 7/2:** Strategies and policies concerning human exposure to **electromagnetic fields (EMFs)**

For more information: <https://www.itu.int/net4/ITU-D/CDS/sg/questions.asp?lg=1&sp=2018>



# Role of Academia @ ITU-D SG (1)



## ➤ Active as part of ITU-D Study Group Management

- SG2 **Chairperson** (Dr Sharafat)    SG1 **Vice Chairperson** (Dr Kaptur)
- **Co-Rapporteur** Q2/2 (Dr Nakajima)
- **Vice Rapporteurs** Q4/1 (Dr Giovanetti), Q7/1 (Dr Giannoumis and Dr Mahmoudi), Q2/2 (Dr Androuchko, Dr Jordanova, Dr Domond, Dr Owuor), Q5/2 (Dr Oloyede)

## ➤ Speakers in ITU-D Study Group Workshops & Webinars and authors/contributors to ITU-D Study Group Annual papers (annual deliverables) and ITU News blogs



**ITUWebinars**  
**Reflections on COVID-19**

*ITU-D Study Group Dialogues on Digital accessibility, Economic implication on infrastructure, Unsolicited commercial communications, Broadcasting services, E-health, Emergency telecommunications, Environment*

24 June 13:00 - 14:00, CEST  
29 June 14:00 - 15:30, CEST  
2, 3 & 6 July 14:00 - 15:30, CEST  
14 July 14:00 - 15:40, CEST  
15 July 14:00 - 15:30, CEST  
29 July 14:00 - 15:30, CEST  
[www.itu.int/go/COVID19-dialogues](http://www.itu.int/go/COVID19-dialogues)

# Role of Academia @ ITU-D SG (2)



## ➤ Experts as trainers/teachers

- Standalone activities (e.g. on e-health: [SG2RGQ/21](#))
- In collaboration with ITU (Centres of Excellence) (e.g. on spectrum management: [SG1RGQ/64](#), [course link](#); and telemedicine: [SG2/203](#), [course link](#))
- As part of **projects** (e.g., FIGI, PRIDA) with government and other stakeholders (e.g. smart cities, [SG2RGQ/161](#))

## ➤ Knowledge sharing/disseminating through organization of regional events jointly with ITU

- Regional Economic Dialogues (e.g. on ICTs, [SG1/276](#))
- Regional workshops (e.g. cybersecurity and child online protection, [SG2/75](#))

## ➤ Joint activities with governments and other stakeholders

- Background analysis (e.g. IPv6, [SG1/78](#))
- Development of surveys (e.g. m-services, [SG1RGQ/94](#))
- Solutions and their applications (see next page)



# Academia ICT Solutions @ ITU-D SGs

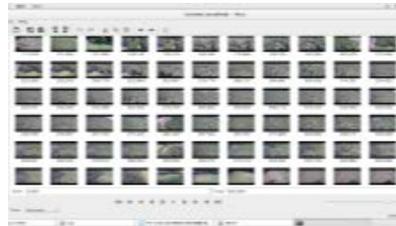


## ➤ [Broadband] Broadband calculator (SG1/42)

Selection of the most promising solution for building the broadband access networks, based on input parameters (locality, access technologies, existing network, etc.) and simulation modelling

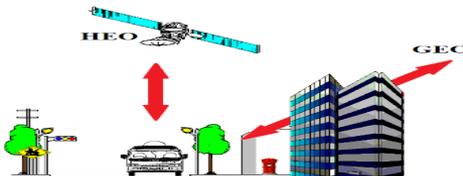
## ➤ [Environment] Automatic search for dead pines using AI (SG2RGQ/173):

Determine the location of dead pines using drones and AI to prevent further damage from spreading



## ➤ [E-health] Ambulance communication using HEOs (SG2/278 (Rev.1))

Use of Highly inclined Elliptical Orbits (HEOs) satellites for reduced blockage and in rural areas



# Potential future study topics @ ITU-D SGs



- ✓ Impact of pandemic situations such as **COVID-19** and ways to address them better through ICTs
- ✓ Application and impact of **emerging technologies** such as AI, IoT and 5G, including for: Smart cities and communities, E-health, Conformance and interoperability, etc.
- ✓ **Financing and investment** aspects (e.g. broadband)
- ✓ **Economic aspects/implications** of digital transformation
- ✓ The **role of innovation** (e.g. for use in rural and remote areas)
- ✓ Fostering **consumer trust in new technologies** while protecting innovation
- ✓ Timely implementation **ICT accessibility for all**, including for new technologies
- ✓ Utilization of Telecoms/ICTs for **disaster response and recovery**
- ✓ Role of ICTs in **preventing natural catastrophes** in human settlements
- ✓ **EMF exposure** with 5G and AIOT technologies

*Won't you join & shape the future **together** @ [SG1RGQ/313](#), [SG2RGQ/280](#) ?*



Welcome to ITU  
**Knowledge Platform & Network**  
④ **Academia**

<https://academy.itu.int/index.php/main-activities/partnerships>

**Thank You**  
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