**ANNEX 1**

**Academia[[1]](#footnote-2) engagement opportunities in the work of the ITU Telecommunication Development Sector (ITU-D)**

ITU-D continues to actively promote Academia membership and their engagement in ITU-D’s priorities and platforms. It should be noted that some universities and research institutes have expressed interest in exploring collaboration partnerships whilst considering joining ITU.

This Annex is composed of two Sections. Section 1 provides a review of the past and ongoing collaborations with ITU-D both with **ITU Academia members** and **non- Academia members** at global, regional and national levels ranging from academic research, expertise for analysis for evidence-based policy recommendations, data collection and assessments, joint reporting, joint events and capacity development activities, amongst others. Section 2 describes additional potential areas to explore collaboration with Academia in 2024.

**Section 1: Past and ongoing collaborations:**

* **ITU Academy**: ITU works with a wide range of partners to develop and deliver its **capacity development activities**. These include the ITU Academy Training Centres (ATC) , public and private training institutions, universities, and industry partners, as well as development agencies. Several of the ITU Academy Training Centres (ATC) are Universities, although not necessarily ITU Academia members. Here is the list: <https://academy.itu.int/itu-d/projects-activities/itu-academy-training-centres/centres>. To cite some examples ITU Academia members: University of the West Indies, Jamaica and INICTEL – UNI, Peru. These institutions offer courses on the different thematic priorities of the development sector and support regional capacity development initiatives. Additionally, an example of ATC support for regional initiatives is INATEL of Brazil (Non- Academia members), who supports the capacity development program for the removal of barriers to the deployment of infrastructure with the collaboration of SBA (ITU-D Sector Member).
* **ITU-D Study Groups Engagements:**
	+ ITU Academia members with representatives in management team where they curate documents contributed to the study Question to develop deliverables (reports, guidelines) as well as contribute to the relevant research work:
* Anglia Ruskin University - Q4/1
* Beijing University of Posts and Telecommunications - Q4/1
* China Institute of Communications (CIC) - Q2/1, Q6/1, and Q7/2
* Ecole Nationale Supérieure des Postes, Télécommunications et TIC (SUP'PTIC) of Cameroon Q3/1, Q6/1 and Q5/2
* Seisa University, Japan – Q2/2
	+ ITU Academia members are also engaged as active contributors sharing their relevant research work with study Questions:
	+ Waseda University, Japan
	+ Institute of Telecommunications and Global Information Space, Ukraine
	+ Universitat Autònoma de Barcelona, Spain
	+ Nazarbayev University, Kazakhstan
* Non-Academia members also shared their work through public workshops organised in **April/ May 2024** to complement content of ITU-D Study Groups:
* Federal University of Maranhão (UFMA), Brazil
* Tsinghua University, China
* University Cheikh Anta Diop, Senegal
* Fraunhofer HHI, Germany
* Keio University, Japan
* Thammasat University, Thailand
* Universidade Federal de Campina Grande, Brazil
* Texas A&M University, United States
* University of Geneva, Switzerland
* Middle East Technical University, Türkiye
* University of Jyväskylä, Finland
* Ecole Nationale de Cybersecurité à Vocation Régionale, Senegal
* **University of Tokyo, Japan (ITU Academia member):** Since 2015 (ongoing), collaboration on the development of methodologies for using mobile phone big data for official statistics and disaster response. The collaboration began with the University of Tokyo assisting ITU in analysing population movements using Call Detail Records (CDR) data to help Member States in emergency telecommunications. ITU has continued the partnership with this University as member of the Task Team of the United Nations Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBD Task Team) on Mobile Phone Data, led by the ITU.
* **University of Warwick, United Kingdom (Non-Academia member):** 2021-2022, the ICT Data and Analytics Division partnered with the University of Warwick to create machine learning models for estimating internet usage in communities next to schools. This effort utilized publicly accessible open-source big data, including satellite imagery, social media usage, and data on population and ICT infrastructure. The partnership began in the summer of 2021 through the university's Data Science for Social Good program. It involved using ICT household data from Brazil, Thailand, and the Philippines as "ground truth data" for training the machine learning models. This initial stage was innovative, demonstrating the feasibility of using open-source data for local-level internet usage estimations. In 2022, the collaboration progressed as students assisted the ITU in enhancing and refining the Python codes for big data collection, processing, and analysis. The Data Science for Social Good program at the University of Warwick proved to be an excellent opportunity for the ITU to engage with skilled data scientists and explore new ways of using ITU data for policymaking.
* **University of Southampton, United Kingdom (Non-Academia member):** ongoing discussions with WorldPop research group, housed at the University of Southampton, on small area estimation techniques. This endeavor is connected to the prior collaboration with Warwick University, which focused on estimating the internet usage rates at the sub-national level through big data sources. The WorldPop research group, specialists in geospatial modeling, can offer valuable expertise that can enhance the precision of ITU's statistical models.
* **University of Pennsylvania, United States** **(ITU Academia member)** The World House Student Fellows[[2]](#footnote-3) has been collaborating with ITU-D on various policy projects research. In ITU-D one of the projects is developing a policy brief to highlight the importance of online safety for women and girls. This brief also explores ways on how governments can address this issue, aiming to enhance safe internet access for women.
* **EQUALS Global Partnership** to Bridge the Gender Digital DivideResearch Coalition partners with the **Korean Advance Institute of Science and Technology – KAIST, Korea (Rep.of), Georgia Institute of Technology, United States, and University of Pennsylvania, United States (ITU Academia members).** The **Oslo Metropolitan University, Norway (non-Academia member)** is also a Research Coalition partner. The Research coalition: a) identifies key knowledge and evidence gaps, conducts research on priority topics, provides practitioners and policymakers with actionable information; and b) collects and analyses data and case studies to understand global gender disparities in technology access, skills development, and leadership opportunities.
* **INICTEL UNI, Peru (ITU Academia member)**, will collaborate to deliver the CyberDrill Americas 2024 on September 2024. INICTEL UNI will collaborate on content delivery and hosting of the event.
* **UNAH - National Autonomous University of Honduras (Non-Academia member)**: a permanent academic ally for the implementation of capacity development actions. It also provides its infrastructure and technical support for activities such as CyberDrills and other events with the Government of Honduras.
* The **University of Santiago de Chile** **(Non-Academia member):** will host and support the Cyber Capacity Building training organized in Chile.
* **FLACSO[[3]](#footnote-4) Argentina (Non-Academia member:** collaborated with ITU Youth Digital Inclusion project with the Gran Chaco Foundation, where digital and soft skill training was delivered to youth in remote and indigenous communities in the Gran Chaco region, Argentina. Collaboration focused on ensuring courses had adequate curricula, relevant content, and a contextualized delivery methodology for the meaningful appropriation of technology of local youth.
* **Campinas University of São Paulo, Brazil** **(Non-Academia member)**: continues to partner with ITU since 2023 in the implementation of the Americas Girls Can Code initiative, providing trainers and hosting courses.
* The **Union of Computer Scientists of Cuba (Non-Academia member):** collaborated decisively in the organization and promotion of Accessible Americas 2023. **Universidad de las Ciencias Informáticas**, Cuba **(former ITU Academia member** continues to support initiatives, seminars, and other activities in the Americas Region.
* **Chulalongkorn University in Thailand (Non-Academia member)**: worked closely with ITU to conduct a number of research studies to inform evidence-based policymaking. In Thailand, ITU worked with Chulalongkorn University on a socio-economic impact assessment of the Net Pracharat village broadband internet project. Additionally, with the International Organization for Migration (IOM), ITU and Chulalongkorn University conducted a digital skills assessment of Migrant Workers and the Perspective of Employers in Thailand. Finally, at the regional level ITU and Chulalongkorn University conducted a study on the key 5G enablers in the Asia-Pacific region, including infrastructure readiness, national broadband strategies, regulatory frameworks, spectrum availability and allocation, and policy enablers, and to investigate how these enablers relate to the implementation and adoption of 5G technology. This was conducted through an econometric analysis that utilized ITU’s DataHub indicators, complemented by other internationally comparable data sources. Moreover, Chulalongkorn University has been a committed partner of Girls in ICT Day Thailand, promoting ICT and STEM education through various self and joint programs with Girls in ICT Day partners, furthering the commitment to bridging the digital gender divide.
* **Thammasat University in Thailand (Non-Academia member):** its experts worked closely with ITU to conduct research study to inform evidence-based programming. These include a study on approach for mapping school connectivity and digital skills, as part of a GIGA[[4]](#footnote-5) project feasibility study of countries in the Asia and the Pacific region, and ITU and Internet Society (ISOC) 2023 study on sustainability aspects of Smart Villages and Smart Islands (SVSI), titled "From Telecentres and Community Networks to Smart Villages and Smart Islands.” Additionally, ITU and Thammasat University developed a common methodology and the required tools to conduct a needs assessment for Smart Villages and Smart Islands. This guide and toolkit will help the SVSI initiative scale to more countries and guide experts to conduct needs assessment study in a consistent and quality manner. Thammasat University has been a committed partner of Girls in ICT Day Thailand, promoting ICT and STEM education through various self and joint programs with Girls in ICT Day partners, furthering the commitment to bridging the digital gender divide.
* **Juntendo University in Japan (Non-Academia member):** ITU and the Ministry of Digital Economy and Society (MDES) Thailand are partnering with Juntendo University and the World Health Organization (WHO) on an information session on 1 April 2024 to gain insights on supporting the health and well-being of older persons in Thailand through digital inclusion. This builds on the ITU and WHO m-ageing program, which was launched in 2018 and designed to provide integrated, digitally enabled services focusing on health and well-being, public services, and cyber safety. In this context, Juntendo University will present their latest research on Thailand’s Aging Demographics and Information and Communication Technologies' Role in Empowering the Older Persons in Different Cultures, in order to engage and facilitate a dialogue amongst relevant agencies to understand the needs and challenges faced by the older population in the context of digital inclusion and healthy ageing in Thailand.
* **Indian institute of Technology (IIT) Kanpur, India** **(Non-Academia member)**: As part of the Regional Innovation Forum (RIF) held on 23 March 2023 in Delhi, India, ITU collaborated with IIT Kanpur to organize a showcase of emerging technological innovations from academia linked to digital health solutions. This showcase was conducted alongside exhibitions from other international and national innovators in India. Additionally, in parallel with the RIF, a co-creation demonstration session was co-organized by ITU and IIT Kanpur on Digital Health an example of co-creating solution, where IIT Kanpur presented two innovative solutions that were then further built upon through open discussion facilitated by ITU’s innovation and co-creation tools. Through this co-creation session, the participants discussed the opportunities and challenges for scaling up India’s digital health ecosystem and to understand how the ITU Area Office & Innovation Centre can best support the further development of digital health innovations through partnerships and collaborations in the region to create potential next steps.
* **United Nations University Institute (UNU) in Macau, China and the Asian Institute of Technology (AIT), Thailand (ITU Academia member):** Through the Department of Foreign Affairs and Trade (DFAT) Australia funded project on Enhancing the Development of Standards and Frameworks for Critical Technologies in Southeast Asia, ITU collaborated with UNU Macau in 2023 to conduct research on [Gender-sensitive Artificial Intelligence (AI) Policy in Southeast Asia](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcollections.unu.edu%2Fview%2FUNU%3A9076%23viewMetadata&data=05%7C02%7CDonis.Sadushaj%40itu.int%7Cd4f1a14e80574a3ee6b408dc4d9f6a34%7C23e464d704e64b87913c24bd89219fd3%7C0%7C0%7C638470594266363245%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=iemupXM%2Flwtfus6IDQfDjecfDAlRGWi6S%2Fu3ECcOwOI%3D&reserved=0), specifically focused on Indonesia, Malaysia, the Philippines and Thailand. This research informed gender-sensitive AI policy development in the four countries and provided a number of key recommendations for policymakers’ consideration. Additionally, ITU collaborated with AIT under the project to provide capacity-building training to policymakers in the four countries on the fundamentals of AI as well as the gender and social risks posed by AI technology. This included a series of training sessions delivered as part of the ASEAN Girls in ICT Day 2023.
* **Kostanay Engineering and Economic University (KEnEU) in Kostanay, Kazakhstan (ITU Academia member):** Through the implementation of a joint project “Smart Kostanay Ecosystem” ITU and KEnEU have created a training and knowledge sharing ecosystem in Kostanay region of Kazakhstan. This ecosystem efficiently accumulates and disseminates best practices and delivers trainings on subjects ranging from startups to child online protection and helps to bridge the gap with the capital region of the country. Additionally, the project directly implements connectivity initiatives and has established broadband internet connection in [several schools in the rural areas](https://flic.kr/s/aHBqjAXVTE) that were heavily affected by forest fires in 2022. In 2023 Kostanay hosted a regional [ITU event “School Connectivity Week”](https://www.itu.int/en/ITU-D/Regional-Presence/CIS/Pages/Events/2023/Connectivity%20Week.aspx).
* **University of the Witwatersrand (WITS), South Africa (Non-Academia member):** The university’s LINK Centre serves as an ITU Academy Training Centre providing training on a vast range of telecommunication/ICT regulatory topics. In 2024 courses are being offered to enhance the capacity of government officials and policymakers involved in digital transformation efforts. Notable is the Excellence in Digital Government online course, with face-to face courses on the topic being planned.

**Section 2: Potential areas to explore collaboration with Academia:**

* **ITU Capacity Development** works with a wide range of partners to develop and deliver its **capacity development activities**. These include the ITU Academy Training Centres (ATC), public and private training institutions, universities, and industry partners, as well as development agencies. This collaboration expands the scope and reach of the capacity development programmes, avoids duplication, and improves the quality of the initiatives.
* Partnership opportunities for ITU Academia members:
	+ Become an ITU Academy Training Centre (ATC)
	+ Become an ATC programme partner.
	+ Deliver one of ITU’s training programmes.
	+ Partner with ITU on joint delivery of training on specific courses
* **ITU-D** **Innovation and Entrepreneurship Alliance for Digital Development** aims collaboratively to advance five strategic objectives to accelerate countries’ journey towards an innovation-driven digital economy. Options for ITU Academia members engagement with the Alliance include:
* Engage in activities with one of the three vehicles of the Alliance:
	+ collaborate with the Digital Transformation Lab.
	+ collaborate with the Digital Innovation Board.
	+ collaborate with one or the Network of ITU Acceleration Centers.
* Join the Network of ITU Acceleration Centers:
	+ become part of/host an ITU Acceleration Centre (in the second cohort of centers, timeline to be determined).
* Enter in a strategic partnership with the DT Lab or a Centre**:**
	+ Establish a Joint-Program to create mutually beneficial strategic partnerships to accelerate creating an equitable digital future for all.
* **Universal and meaningful connectivity:**
* Training
	+ Preparation and delivery of hands-on training course on Small Area Estimation for staff of National Statistical Offices (NSOs) to prepare detailed “UMC maps”.
	+ Program for collaboration (Europe only but similar other regional approaches could be explored) – Eurostat’s European Master of Official Statistics (EMOS, [European Master in Official Statistics - Eurostat (europa.eu)](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fec.europa.eu%2Feurostat%2Fen%2Fweb%2Feuropean-statistical-system%2Fprogrammes-and-activities%2Feducation-and-training%2Feuropan-master-official-statistics&data=05%7C02%7CDonis.Sadushaj%40itu.int%7Cea36b1de7e68463e66c608dc4d6ea129%7C23e464d704e64b87913c24bd89219fd3%7C0%7C0%7C638470384736824803%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=wf4aruFzapvncYwNS8jfAutzuMuiNHuCK020Sz53%2BzA%3D&reserved=0)). It certifies Master programs in European Universities that can be considered as part of the official statistics curriculum. Through EMOS, training on ICT statistics could be easily disseminated to the network of 30 universities.
* Research
	+ Consolidation of research on digital gaps.
	+ Experimental research on behavioural aspects of use of ICT.
* Networking and collaboration
	+ Collaboration through the International Statistical Institute (ISI, [Home | ISI (isi-web.org)](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fisi-web.org%2F&data=05%7C02%7CDonis.Sadushaj%40itu.int%7Cea36b1de7e68463e66c608dc4d6ea129%7C23e464d704e64b87913c24bd89219fd3%7C0%7C0%7C638470384736835181%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=F%2Fs9qDK9lSvjIVyzvCarxoJfUGlzLOqPrCjIIQErtCI%3D&reserved=0), a professional association including many academic statisticians, to increase the awareness of the statistical challenges in measuring the Information Society and the Digital Economy.
	+ Facilitating contacts at the national level of National Statistics Offices (NSOs) and other ICT stats producers with Academic partners of ITU, promoting the use of NSOs microdata for research by showcasing examples.
* **Joining the Generation Connect Youth hubs program (GCYH)**: leveraging on the success of the more than seventy hubs (mostly Academia) that participated in the Generation Connect Youth Summit 2022, held in Kigali, Rwanda.
* The programme is designed to be largely youth-led with the guidance of ITU and the host Academic institution, flexible for the needs of each institution, and operable with no additional funding or legal agreements needed.
* Expected to pilot this programme in mid-2024, first with ITU Academia members as hosting hubs, as part of the ITU ecosystem and engaging their youth communities. The programme could then be extended to other organizations applying to host Generation Connect Youth Hubs, tentatively in 2025.
* Joining **EQUALS** and becoming a **Research Coalition partner**.
* Contributing to the EQUALS Research Coalition Annual Report: calling for contributions from academics and researchers who can offer insights, case studies, and scholarly perspectives on the gender digital divide, specifically within the three EQUALS action areas – Access, Skills, and Leadership.

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1. Refers to Resolution 169 (REV. BUCHAREST, 2022) of the Plenipotentiary Conference, which enables the new category of Academia to participate in the work of ITU. [↑](#footnote-ref-2)
2. <https://global.upenn.edu/perryworldhouse/world-house-student-fellows> [↑](#footnote-ref-3)
3. Facultad Latinoamericana de Ciencias Sociales (FLACSO). [↑](#footnote-ref-4)
4. For GIGA – Connecting every school to the internet see
 <https://www.itu.int/en/ITU-D/Initiatives/GIGA/Pages/default.aspx>. [↑](#footnote-ref-5)