

February 2025

Title: **Intern – Internship:** Multimedia technologies & standardization (AI, metaverse, video coding, media authenticity, accessibility, digital health)

Bureau/Dept/Unit: TSB/SGD

Supervision: Stefano Polidori / SG Counsellor

Duration: 6 to 11 months maximum

Location: ITU Headquarter/Geneva, Switzerland

ITU is the United Nations specialized agency for information and communication technologies – ICTs.

We allocate global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect, and strive to improve access to ICTs to underserved communities worldwide.

ITU is committed to connecting all the world's people – wherever they live and whatever their means. Through our work, we protect and support everyone's fundamental right to communicate.

Today, ICTs underpin everything we do. They help manage and control emergency services, water supplies, power networks and food distribution chains. They support health care, education, government services, financial markets, transportation systems, e-commerce platforms and environmental management. And they allow people to communicate with colleagues, friends and family anytime, and almost anywhere.

With the help of our global membership, ITU brings the benefits of modern communication technologies to people everywhere in an efficient, safe, easy and affordable manner.

ITU membership reads like a Who's Who of the ICT sector. We're unique among UN agencies in having both public and private sector membership. So in addition to our 193 Member States, ITU membership includes ICT regulators, many leading academic institutions and some 700 tech companies.

In an increasingly interconnected world, ITU is the single global organization embracing all players in this dynamic and fast-growing sector.

1. **Organizational Unit**:

**TSB/SGD**

The Telecommunication Standardization Bureau (TSB) fulfills the objectives of the Union relating to telecommunication standardization, by providing secretariat support to groups studying technical, operating and tariff questions and facilitating the adoption of Recommendations in these areas with a view to standardizing telecommunications and information technology on a global basis. To achieve these objectives, the Telecommunication Standardization Bureau works in accordance with the instructions of the World Telecommunication Standardization Assemblies (WTSA), Telecommunication Standardization Study Groups and the Telecommunication Standardization Advisory Group. TSB, headed by an elected Director, provides the technical, administrative and logistic support for the assemblies and for the meetings of the groups mentioned.

The Study Groups Department (SGD) is responsible for facilitating, managing and supporting the work of the ITU-T study groups in the development of global telecommunication standards (ITU-T Recommendations) and other documents and databases related to standardization. It provides the counsel and secretariat for the Sector's study groups, focus groups and other ad hoc groups. Particular attention is given to "Bridging the Standardization Gap", i.e., to strengthen the participation of developing countries in the standards making process. The Department maintains close relations with the ITU Radiocommunication and Telecommunication Development Sectors and takes part in their work as required. Likewise, it cooperates with other global standards organizations such as ISO and IEC as well as recognized industry forums and consortia.

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| 1. **Organizational context:**   The ITU Telecommunication Standardization Sector (ITU-T) has long been at the forefront of standardization work in multimedia technologies, content delivery, and cable television. With the recent consolidation of two longstanding study groups (SG9 and SG16), a new Study Group, SG21, was formed to drive the development of international standards in these fields. SG21 is tasked with advancing ITU-T Recommendations in key areas such as video coding, media authenticity, immersive multimedia technologies, and metaverse-related innovations. The group’s scope also includes multimedia applications and services, smart mobility, digital health, content distribution, digital media processing, accessibility, and the integration of advanced technologies like AI, cloud computing, and distributed ledger technologies to enhance user experiences. To support the expansion of these topics within the United Nations and further promote the international standardization of related technologies, the incumbent, under the guidance of the responsible Counsellor, will play a pivotal role in coordinating, researching, and implementing projects that strengthen and position ITU's leadership in the evolving field of multimedia technologies. |

## **Terms of Reference / Internship Objective:**

Under the supervision of the TSB Counsellor, the intern will:

− Contribute to the implementation of specific projects in the field of multimedia technologies, including video coding, media authenticity, immersive multimedia technologies, the metaverse, and AI, as well as their application to areas such as digital health, smart mobility, digital culture and accessibility.

− Support collaboration with partner organizations within the United Nations, ITU Sector Members, Member States, and other international organizations to ensure action is taken for the approval and/or implementation of related projects.

− Undertake necessary actions to ensure the efficient implementation of approved projects assigned to him/her.

− Participate in the organization of, and take part in meetings for projects implementation. Identify and propose options to resolve related technical and policy issues.

− Draft reports and presentations to assist in monitoring and evaluating the implementation of projects, analyzing progress, and supporting project tracking and reporting.

− Support the revamp and maintenance of the content of existing ITU webpages on SG21-related topics such as multimedia technologies, immersive experiences, AI, cloud computing, and video coding.

− Research policy and technical issues to develop content for new/existing webpages, considering recent trends and developments within ITU-T SG21 as well as emerging global topics in multimedia technologies, e.g. media authenticity, the metaverse, and AI.

− Maintain and update relevant multimedia communication standards databases, work programme and other online resources.

− Draft/check relevant documents and reports, and participate in the preparation of documentation, including, specifications, terms of reference and promotional materials for various ITU resources.

− Support the organization and follow-up of onsite/online events, webinars, and workshops related to multimedia technologies, immersive media, the future of television, and digital media services.

− Support related events' promotion on social media (e.g., LinkedIn) by creating content for online posts.

1. **Competencies**

**Technical Competencies:**

Interest in innovation in the field of multimedia technologies is an important skill for the successful candidate.

The incumbent will be integrated in a team, within the Study Group Department of the Telecommunication Standardization Bureau, under the supervision of a TSB Counsellor. Regular contacts and reporting on a weekly basis are expected. The incumbent will interact with ITU Member States, Sector Members and other stakeholders who participate and contribute to ITU-T Activities as well as with external partners organizations. Therefore, good interpersonal relationship skills are also important.

1. **Qualifications required**
2. **Education**:

University degree in areas related to information and communication technologies (e.g., engineering, telecommunication, computer sciences), as well as international relations or international developments studies. Other university degrees will be considered based on the areas of the research.

1. **Work experience**:

No work experience is required.

1. **Languages:**

Excellent knowledge of English for conducting research and producing content for documents and webpages is a preference for this post.

1. **Training and Learning Elements:**

The intern will acquire excellent knowledge and experience of:

− The United Nations system and its processes.

− The International Telecommunication Union (ITU) frameworks, policies, and standardization activities.

− Research in innovative multimedia technologies, including video coding, media authenticity, immersive multimedia experiences, AI, the metaverse, and digital content delivery.

− International standardization processes within ITU-T Study Group 21.

− Event and workshop organization in the context of international telecommunications and multimedia technologies.

− Modern working tools and the use of social media for professional engagement and communication.

Learning will be structured and will take place through participation in ITU meetings and/or workshops, by studying ITU reports, surveys, online research, by mentoring and on-the-job training. The post holder will report to a direct supervisor who will provide learning opportunities by the following means:

− Attending ITU trainings dedicated to staff

− Attending language courses organized by ITU to staff

− Attending international events on the topics of interest of the post

1. **Additional information**

None.