



International Telecommunication Union (ITU)

WHAT IS ITU?

The International Telecommunication Union (ITU) is the United Nations specialized agency for information and communication technologies - ICTs.

Established in 1865 as the International Telegraph Union it is one of the oldest international organizations in operation. ITU is committed to connecting the world

ITU has three main areas of activity:

Radiocommunications:

ITU coordinates this vast and growing range of radio-communication services, as well as the international management of the radio-frequency spectrum and satellite orbits.

Standardization:

ITU standards (Recommendations) are fundamental to the operation of today's ICT networks. Without ITU standards you couldn't make a telephone call or surf the Internet.

Development:

ITU champions a number of major initiatives which encompass ITU's internationally-accredited mandate to 'bridge the digital divide',

ICT DEVELOPMENT AND WASH

ICTs are particularly important for smart water management. They are crucial for facilitating the measurement and monitoring of water supplies as well as other necessary interventions. ICTs also enable practitioners at the local level to ensure the equitable and sustainable extension of water, sanitation, and hygiene (WASH) services. As the costs of ICTs continue to fall, governments will be able to better integrate ICTs into monitoring and evaluation frameworks to optimize operations and improve the quality of service.



ICT STANDARDIZATION AND WASH



ITU Standards offer technical guidance and harmonized methodologies for improving the operational efficiency of water systems and providing solutions for smart water management (SWM). Led by ITU-T Study Group 5 "Environment, climate change and circular economy" and ITUT Study Group 20 "Internet of things (IoT) and smart cities and communities", these inclusive standards have identified the standardization gap in SWM, which is crucial for establishing a baseline for future standardization activities, defined the requirements for water sensing systems and water quality assessment as well as examined the role of SWM in cities and communities. In addition, ITU standards are also providing guidance on using ICT sustainably and helping countries and the ICT sector to achieve Net Zero emissions.

Modern radiocommunication technologies, such as 5G mobile networks, Earth observations satellites, data collections platforms, radars, provide technological solutions and develop mechanisms to stimulate efficient use of natural resources at the international and national levels. Information collected by the number of different sensors and receivers on board satellites, aircraft and ships, fitted to buoys, livestock, and so on, help humanity to optimize decision-making by allowing a deeper understanding of the relevant technocratic, natural and socio-economic processes of consumption, in particular fresh water. Transition from intuitive manual forms of resource management to an algorithm-based one that relies on the development and use of coherent models for political, economic, technological and behavioural analysis and decision-making with the aid of artificial intelligence will upgrade management systems, reducing demand by using resources efficiently and protecting our planet's natural ecosystem..



THE WAY FORWARD

ITU's work, particularly, on radio communications and smart village platform is of great interest to me. I believe that we should further focus our efforts on interacting and communicating via radio so that the voices of people living in rural areas without adequate access to the Internet could be heard and they can be informed and consulted. Development of ICTs and radio communication is a way to empower the people which is an element of global democratic governance.



Pedro Arrojo-Agudo,
UN Special Rapporteur on the human rights to safe drinking water and sanitation

*The Special Rapporteur held a meeting with ITU representatives on 15 March 2021