



TSB DIRECTOR CTO MEETING

24 September 2017, Busan, Republic of Korea

COMMUNIQUE

High-level ICT industry executives (CTOs) have highlighted the strategic importance of international standardization's support for the evolution of global telecommunications networks and the contribution of artificial intelligence (AI) to the reduction of operational expenditure and the improvement of the use and maintenance of networks.

CTOs met with the senior management of the ITU Telecommunication Standardization Sector (ITU-T) at the ninth annual CTO Meeting in Busan, Korea, at ITU Telecom World 2017. The meeting provided the leadership of ITU-T Sector Members with an opportunity to exchange views with the Telecommunication Standardization Bureau (TSB) on industry needs and related standardization priorities. The meeting was also attended by the Director of the ITU Radio Bureau.

Intelligence for network automation, augmentation and amplification

Participants examined emerging scenarios enabled by machine learning and AI methods, tools and techniques to create data-driven, intelligent, robust and secure systems. In the context of future 5G systems, such methods will allow for a better understanding of the behavior of both users and the network, enabling the optimization of the use of scarce radio resources and the prediction of related decisions' impacts over time. Automatic detection and resolution of anomalies and other incidents of inefficiency, as well as predictive maintenance, will contribute to a reduction of the operational expenditure of network operators, as well as service providers in other sectors. The meeting also learned how some operators offer AI-enabled services as a unique selling proposition to their subscribers.

The meeting called for further studies in ITU to identify and better understand the standardization needs for intelligence in 5G systems and the telecommunications sector. These studies should start with a review of AI-related definitions and terminology; cover an analysis of existing and emerging standards and specifications in this domain; and further address the architecture, interfaces, functional entities, service scenarios and protocols required for intelligence retrieval and actuation.

Convergence calls for flexible networking solutions

CTOs expressed the view that the use of intelligence and virtualization techniques at the network edge constitutes yet more evidence of the convergence of IT and telecommunications sectors.

ITU has been successful in building a widely recognized technological leadership in transport networks, which has been beneficial for the telecommunications industry as a whole and should be maintained as a common asset. Convergence, and the entrance of fast-growing OTT players and other industry sectors to

the ICT ecosystem, yields a new set of requirements to be met through common flexible, programmable and scalable networking solutions.

CTOs called for ITU-T standardization work to take these new requirements into consideration, addressing short-distance, large-bandwidth and low-cost data center interconnection, edge cloud inter-networking, and emerging fronthaul and midhaul technologies to support the deployment of 5G systems.

Participants recommended to ITU-T to engage with OTT and vertical sector organizations to identify, understand and respond to their networking requirements in a timely and accurate manner. They invited Google, Facebook and other interested parties to submit technical contributions on data center interconnection to ITU-T Study Group 15, ITU's lead group on transport networks. The meeting highlighted the need for ITU-T to build synergies with other SDOs and open source communities to enable seamless connectivity across fixed and mobile networks.

Next steps

The Rapporteur on ITU-T standardization strategy thanked attendees of the CTO meeting for their valuable guidance and gave examples of how recommendations made by past CTO meetings had given rise to new ITU-T standardization activities.

The CTO meeting's participants expressed their gratitude to ITU-T and ITU-R for the opportunity to exchange views on standardization priorities.

Chaesub Lee, the Director of the ITU Telecommunication Standardization Bureau, extended an invitation to CTOs to participate in a meeting of C-level executives of ICT companies and invited guests representing other industry sectors, scheduled for 7 December 2017 in Dubai, UAE, kindly hosted by Trace Media.

The participating organizations were:

Ericsson, Sweden; **ETRI**, Korea (Rep. of); **Fujitsu**, Japan; **Hewlett Packard Enterprise**, United States; **Huawei Technologies**, China; **KDDI**, Japan; **KT**, Korea (Rep. of); **NEC**, Japan; **NICT**, Japan; **Nokia**, Finland; **Orange**, France; **Samsung Electronics**, Korea (Rep. of); **Telkom**, Indonesia; **Trace Media**, United Arab Emirates; **TTC**, Japan; **Tunisie Telecom**, Tunisia; **ITU** (TSB and BR).