

Welcoming remark by Heung Youl Youm, Chairman of ITU-T SG17

TSB director, Mr Chaesub Lee,  
Distinguished colleagues and friends,

Good morning, good afternoon, and good evening,

I sincerely thank Mr Chaesub Lee for giving us his insightful opening remark.

It is my pleasure and honor to add my welcome remark to this ITU workshop on security for 5G and beyond, the first physical ITU workshop with remote participation in conjunction with ITU-T SG17 meeting since Pandemic in 2020.

As you may know, ITU-T SG17 is responsible for building confidence and security in the use of ICTs by producing a set of high-quality technical standards in the area of security and data protection. Providing security by ICTs and ensuring security for ICTs are both major study areas for Study Group 17.

I understand that it is an appropriate time for ITU to study the 6th generation wireless network technology (6G), which is expected to be implemented around the year 2030. It should incorporate various new capabilities so that everyone can benefit from hyper-connectivity between people and everything. Several potential technologies may include new and emerging technologies such as post-quantum cryptography, artificial intelligence (AI), machine learning (ML), enhanced edge computing, molecular communication, high frequency, visible light communication (VLC), and distributed ledger (DL) technologies such as blockchain. Given this context, new novel authentication, encryption, access control, communication security, and malicious activity detection should satisfy the higher significant requirements for 6G. In addition, new security approaches are necessary to ensure trustworthiness and privacy.

I would like to stress that WTSA-20 Resolution 92 (Enhancing the standardization activities in the ITU Telecommunication Standardization Sector related to non-radio aspects of international mobile telecommunications) was agreed including instruct Study Group 17 clause:

- 1 to continue promoting the studies on standardization activities related to network and applications security for IMT-2020 and beyond;
2. to continue promoting the studies on standardization activities related to network and applications security for IMT-2020 and beyond and to promote coordination and collaboration with ITU-R and other SDOs, such as 3GPP SA3, on security aspects of IMT-2020 and beyond in the course of development of the relevant specifications or ITU-T Recommendations.

As such, I believe that it is an appropriate time for SG17 to identify the gaps on the 5G security and new security concept and capabilities for 6G security taking into account new 6G context. The objectives of the workshop as developed by steering committee include:

- a focus on 5G [IMT-2020] security gaps and new security directions for 6G [IMT-2030];
- better understand the threat landscape and identify novel security concepts for 6G [IMT-2030];
- provide a platform for knowledge exchange of on-going 5G security activities in relevant ITU study groups and other relevant groups such as ITU-T SG2, 3, 13 and 17, ISO/IEC JTC 1/SC27, ETSI, 3GPP, and GSMA and identify any security gaps;
- develop common understanding of the security challenges in 6G [IMT-2030];
- identify challenges that need to be addressed and fundamental security requirements and functions to build 6G security including strategies for transition from 5G security to 6G security;
- explore opportunities for collaboration on new topics and in on-going work as well as identify mechanisms to facilitate collaboration and harmonization of standardization activities for 5G security and beyond.

As you may know, ITU-R WP5D is now working on preparing 6G vision document. I think it is very important for SG17 to provide input to the 6G vision document being developed by ITU-R WP5D from the security point of view. I hope this very important issues should also be addressed in the workshop and provide a result to SG17 meeting following this workshop.

To conclude, I introduce the SG17 motto since 2017, which I have presented at every SG17 meeting, SAFE, security is absolutely first everywhere. That means that security by design principles should be applied to all ICT services and products from the beginning.

Lastly, I thank the 14 Steering Committee members including TSB event teams, Dr Gifty Amoah and SG17 project assistant, Ms Gillian Makamara for their excellent support to this event.

I thank in advance all the masters of ceremony, four session moderators, speakers, and panelists for the insights they bring to the event. I also thank ETRI, Korea for sponsoring two coffee breaks for this workshop. I hope you enjoy this offering.

I also thank the 356 pr-registered participants present in person and online from all over the world, and I hope you will find the event insightful and useful.

This concludes my remarks. Thank you very much.