

Good morning Ladies and Gentlemen,

I am Heung Youl Youm, SG17 chairman.

First of all I would like to thank Dr Chaesub Lee, the director of ITU-T, for his insightful remarks and kind words for this ITU workshop on security aspects of blockchain.

It is a pleasure to welcome all of you to this ITU-T Workshop on security aspects of blockchain, the first ITU workshop by SG17 in this study period.

Recently blockchain, also known as distributed ledger technologies, has become one of the most important disruptive technologies with great potential to change our economy, culture and society fundamentally.

As a specific distributed database technology, blockchain technologies have a unique feature – that they are inherently resistant to modification of the data; once recorded, the data in a block cannot be altered retroactively. Its technical background is based on Hash chain and public-key cryptographies including PKI (public key infrastructure). I am aware that X.509 is one of our famous and best downloaded Recommendation, which are widely used in many areas, including e-transactions applications.

The usability of blockchain technologies has become well recognized after the successful operation of its early digital cryptocurrency application, known as Bitcoin, also known as currency for criminals.

Nowadays more and more innovative applications have begun using blockchain technologies, which result in many new digital financial applications and various decentralized applications that eliminate a need for 3rd party intermediaries.

Typical examples include applications for credit management, crowd-funding, P2P insurance, smart contracts, supply chain management, online voting, and medical records.

The objectives of this workshop are to:

- better understand blockchain technology and its implication to security;
- analyze and evaluate the current status of blockchain technology and its maturity;

- discuss security and privacy aspects related to blockchain applications;
- examine means for extending on-line trust using blockchain technologies;
- provide a platform to share findings and for dialogue on policy and regulatory implications of blockchain between enterprises working on blockchain applications and regulators from various industrial/economic sectors; and
- identify potential items that SG17 needs to analyze or review.

As an outcome of this workshop, we will not only identify stakeholders with whom SG17 could collaborate further but also potential collective action and specific next steps to advance work for security aspects of blockchain.

SG17 is ITU-T's core competency center on security attracting participants across the world.

I would like to take this opportunity to mention some statistics of ITU-T SG17 in the last study period (2013-2016);

- SG17 examined 592 contributions and posted 3017 TDs;
- SG17 developed 49 new and 69 revised Recommendations; it also developed 13 Supplements;
- SG17 attracted an average of 155 participants at its study group meetings; and
- SG17 has 81 new or revised draft Recommendations currently under development for approval in this study period.

I would also like to mention some major results of ITU WTSA-16 meeting which was held in Hammamet, Tunisia from end of October to early of November, 2016 that pertain to SG17 for the 4-year study period 2017-2020::

WTSA-16 approved:

- SG17 leadership team
- 12 SG17 Questions for the next study period;
- three SG17 lead study group responsibilities on security, identity management, and language and description techniques; and

- revised WTSA-16 Resolution 50 on cybersecurity and Resolution 52 on countering and combatting spam and adopted several new Resolutions related to SG17 work in this study period,

These provide a very concrete basis for ITU-T SG17 in this study period.

I strongly believe that ITU-T SG17 should continue to strengthen its roles and responsibilities to build confidence and security in the use of ICT.

In addition, ITU-T SG17 should focus on developing security Recommendations that can be implementable by the security industries.

I hope that this workshop will provide an opportunity for SG17 to explore the possibility for studying new emerging areas such as blockchain and give good recommendations to the upcoming ITU-T SG17 meeting so that ITU-T SG17 agrees on the way forward for its work on security aspects of blockchain.

Finally I would like to emphasize that comprehensive security controls including technical and organizational countermeasures are indispensable not only to protect the information assets and build confidence and trust but also to protect reputations of countries, organizations and people.

It is a great privilege for the ITU, as a unique organization under United Nation, to help in providing a set of comprehensive technical Recommendations to address new security challenges and problems in new ICT environments, such as Internet of things, connected car, smart grid, IMT-2020, digital financial service, blockchain etc. .

I'd express my sincere gratitude to the steering committee members of this ITU workshop on security aspects of blockchain.

I also express special thanks to the TSB and to TSB Director Dr Lee for his outstanding efforts in supporting and implementing this timely workshop.

I'd also thank all our distinguish speakers, panellists and session moderators for your support and outstanding work.

I wish all of us an insightful and productive discussion, with ideas that will lead to new implementable security Recommendations.

Thank you.